

A CASE FOR THE INCORPORATION OF PRAGMATIC FEATURES IN GENERATIVE GRAMMARS

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By
ARJYA SIRCAR

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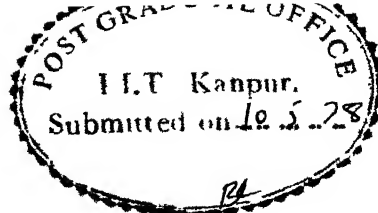
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This is to certify that the thesis "A Case for the Incorporation of Pragmatic Features in Generative Grammars" submitted by Shri Arjya Sircar in partial fulfilment for the degree of Doctor of Philosophy to the Indian Institute of Technology, Kanpur, is a record of bonafide research work carried out by him under my supervision and guidance. The results embodied in this thesis have not been submitted to any other university or institute for the award of any degree or diploma.

(P.P. Sah)

Assistant Professor of English (Linguistics)
Department of Humanities & Social Sciences
Indian Institute of Technology
Kanpur

POST GRADUATE OFFICE
This thesis has been approved
for the award of the Degree of
Doctor of Philosophy (Ph.D.)
in the subject of
English Language and Literature
Indian Institute of Technology Kanpur
Date: 13.11.1978

CERTIFICATE

This is to certify that Mr. Arjya Sircar has satisfactorily completed all the course requirements in the Ph.D. programme in English (Linguistics).

- H.Eng. 701 - Introduction to Linguistics
- H.Eng. 702 - Teaching of English as a Foreign Language
- H.Eng. 704 - Advanced Linguistic Theory
- H.Eng. 705 - Psychology of Communication
- H.Eng. 710 - Critical Approaches to Literature
- H.Eng. 715 - Methodology of Teaching and Research in Literature
- H.Eng. 716 - Individual Project (Linguistics)
- H.Psy. 783 - Advanced Experimental Social Psychology

Mr. Arjya Sircar was admitted to the candidacy of the Ph.D. degree in July, 1976 after he successfully completed the written and oral qualifying examinations.

K.N. Sharma
Head
Department of Humanities
& Social Sciences
I.I.T. Kanpur

M. Mullick
Convenor
Departmental Post-graduate
Committee
Department of Humanities
& Social Sciences
I.I.T. Kanpur

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SYNOPSIS

A CASE FOR THE INCORPORATION OF PRAGMATIC FEATURES IN GENERATIVE GRAMMARS

A thesis submitted in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy by Arjya Sircar to the Department of Humanities and Social Sciences, Indian Institute of Technology Kanpur.

The present study is an exploration in the realm of linguistic theory: it tries to continue the debate between the Generative Semantic and the Generative Syntactic models in a somewhat different way. Although this debate has been carried on with great enthusiasm for quite sometime now, it has to be conceded that, in spite of the undeniable value of the insights provided by linguists like McCawley, George and Robin Lakoff, Postal and others, the semantic model has not been able to capture the methodological rigour of the syntactic model. The purpose of the present work is to argue for a more precise formulation and to show how semantic and pragmatic features can be utilized in the service of grammar. As an illustration, the pragmatic feature "Speaker Attitude" is taken up for detailed study. It is shown, by an examination of both the syntactic and the semantic approaches, how the latter approach, enriched in a systematic way by the feature "Speaker Attitude", provides a descriptively and explanatorily

more adequate account for various kinds of linguistic data pertaining to NEG-RAISING, FACTIVES, IMPERATIVES and PRONOUNS.

In the first chapter theoretical issues are discussed. The notion of linguistic competence is examined afresh and it is suggested that there are atleast two mutually incompatible definitions in the literature: one which sees competence as insulated against any kind of interaction with actual use i.e. one which reduces "the creative aspect of language" merely to syntactic recursion; and the other which views competence as being firmly rooted in actual use. It also suggests that the impoverished view of competence is a necessary consequence of the assumptions implicit in the Generative Syntactic model.

In the next chapter the phenomenon of NEG-RAISE is re-examined. It is argued that neg-transportation in actual use serves to weaken the assertive strength of utterances. When the attitude of the speaker is that of diffidence, he opts for the weak assertives; and, since these predicates are already weak in assertive strength, a further weakening by neg-transportation often escapes detection and the sentence pairs tend to be treated as being synonymous.

In the third chapter FACTIVES are revisited. It is argued that the pragmatic feature "Speaker Attitude" holds the key to the mystery of factivity as well. It seeks to dispel the belief that the complement proposition of a factive predicate is presupposed and not asserted. It suggests that

factivity is a function of the strength of assertions just as neg-raise is a function of their weakness.

The fourth chapter devotes itself to the study of IMPERATIVES. It argues that imperatives can be systematically classified only if the speaker's attitude is taken into consideration. If the attitude of the speaker is that of belligerence, he threatens; if his attitude is authoritative, he commands etc. The necessity of sifting imperatives in this fashion is sought to be established by showing that this kind of classification lends a rationale for the existence of a meaning-preserving or transformation for a subset of imperatives. This kind of classification has the further virtue of explaining the selectional restrictions on these utterances with respect to adverbs.

The pronouns in Bengali and Hindi are taken up in the last chapter. It is shown that, unless "Speaker Attitude" is taken into account, the pronominal forms cannot even be generated in any systematic and non-adhoc way. If the attitude of the speaker towards the addressee is that of "deference", he chooses the (+ Honorific) form whereas, if his attitude is that of "contempt" and/or "familiarity", he chooses the (- Honorific) form. It is also shown that, unless these distinctions are made, the grammar cannot even sift the grammatical from the palpably ungrammatical sentences in very many cases.

CHAPTER I

INTRODUCTION

(1)

The data of linguistic analysis: "The goal of the descriptive study of a language is the construction of a grammar" (Chomsky and Halle (1968:3)) where "a grammar purports to be a description of the ideal speaker-hearer's intrinsic competence" (Chomsky (1965:3)). The notion of competence, thus, assumes a pivotal role in the frame-work of TGG. Not only is it crucial and central to the theory, it becomes the very data which must be "explained" or be "accounted for". Understandably, therefore, there is no dearth of literature which sets out to define and demarcate the domain of competence in clear and scientific terms. What is intriguing, however, is that in spite of this rich crop of literature - there is a distinct ambiguity and a distinct lack of consonance in the various definitions of competence. What Fodor and Garrett (1966) mean by competence is distinctly different from what Katz (1966) has in mind; and Chomsky's views, expressed through numerous papers, cannot completely be identified with the one or with the other. Even if we take Chomsky's viewpoint to be representative of the entire school, we are no better off: he seems to be arguing at cross-purposes - now saying one thing and now another. We should like to identify what appears to us to be the two most dominant interpretations of the concept of competence and then

try to evaluate the immediate consequences of accepting one definition rather than the other.

Competence as an idealized model of linguistic performance:

Even though the first explicit mention of the notion of competence is to be found in Chomsky (1965) - as early as 1957 he can be seen to be arguing for the idealization of the "raw data" when he seeks to distinguish between the sentences of the language that the grammar generates and the corpus of the sentences to be found in actual use. In Chomsky (1965) the notion is brought to a sharper focus: "Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech-community, who knows his language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his language in actual performance" (page 3; *italics mine*). He makes the notion even more clear in the following page: "only under the idealization set forth in the preceeding paragraph is performance a direct reflection of competence (*italics mine*). Further, Chomsky and Halle (1968:3) can only "think of the study of competence as the study of the potential performance of an idealized speaker-hearer who is unaffected by such factors" (*italics mine*). In this view competence can be characterized roughly in this fashion:

Performance - psychologically irrelevant application
factors = Competence.

Competence as the knowledge of the code: The other view sees competence as the knowledge of the code and performance as the use of the code. In this view "to confuse the two kinds of account would be a category mistake. In short it is necessary to observe the difference in the logical character between performance and competence" (Chomsky (1970a:188)). In this view competence has, apparently, completely cut itself adrift from performance (even under the aforesaid idealization) and has nothing whatsoever, unless extremely indirectly, to do with use. The specific point of dispute concerns the position of use in "study" and "construction" of a "grammar": is or is not use a relevant parameter in the construction of a grammar?

It would be fruitless to allow the argument to proceed in a quantitative fashion i.e. trying to see how many quotations can be mustered up in support of one view as opposed to the other. It would be interesting to determine what could be the consequences of adopting one view rather than the other and then trying to evaluate the overall merit of the two positions. Quotations, sometimes lengthy, must be resorted to convince ourselves that the particular view that emerges is recurrent and not casual or random.

Returning to the first view, Chomsky seems to be categorical about incorporating the study of use in his two major works of 1966. "By a 'generative grammar' I mean a description of the tacit competence of the speaker-hearer'

that underlies his actual performance and perception (understanding) of speech. A generative grammar ideally specifies a pairing of phonetic and semantic representations over an infinite range; it thus constructs a hypothesis as to how the speaker-hearer interprets utterances, abstracting away from many factors that interweave with tacit competence to determine actual performance" (Chomsky (1966a:75, note 2; italics mine)). Again "a grammar, in traditional view, is an account of competence. It describes and attempts to account for the ability of a speaker-hearer to understand an arbitrary sentence of his language and to produce an appropriate sentence on a given occasion. If it is a pedagogic grammar, it attempts to provide the student with the ability; if a linguistic grammar, it aims to discover and exhibit the mechanism that makes this achievement possible" (Chomsky (1966b:3; italics mine)). On the very next page — he is even more explicit "The most striking aspect of linguistic competence is what we may call the 'creativity of language', that is, the speaker's ability to produce new sentences, sentences that are immediately understood by other speakers although they bear no physical resemblance to sentences which are 'familiar'. The fundamental importance of this creative aspect of language use has been recognized since the seventeenth century at least" (italics mine).

As early as 1963 Chomsky and Miller had seen that "the fundamental fact that must be faced in any investigation of language and linguistic behaviour is the following: a native speaker has the ability to comprehend an immense number of sentences that he has never previously heard and to produce on the appropriate occasion novel utterances that are similarly understandable to the other native speakers (page 271, italics mine)". It is interesting to note that the "ability to use ones language correctly in a variety of socially determined situations is as much and as central a part of linguistic "competence" as the ability to produce grammatically well-formed sentences" (Lyons (1970:287)). One finds unmistakable corroboration of this in Chomsky (1968:11-12) where he asserts that the normal use of language is not only "innovative" but also has properties of "coherence" and "appropriateness to the situation" and that "we can distinguish normal use of language from the ravings of a maniac or the output of a computer with a random element".

To Chomsky then (in this view) "the basic, most elementary fact that has to be accounted for by anyone who is interested in dealing with the phenomenon of human language in any serious way" is that in normal use the speaker repeatedly encounters "absolutely new signals or produces them on the appropriate occasion without any feeling of strangeness or novelty" (Chomsky (1967b:76; italics mine)).

The other view: "By a generative grammar", says Chomsky (1965:8) "I mean simply a system of rules that in some explicit and well-defined way assigns structural descriptions to sentences". And "when we speak of a grammar generating a sentence with a structural description, we mean simply that the grammar assigns this structural description to the sentence" (1965:9).

The scope and function of "generative grammars" that is envisaged by the respective positions can be made an explicit point of comparison. And it is obvious that the second view appears to suffer by contrast inasmuch as the claims it makes with regard to the scope and function of generative grammars appear extremely uninteresting and of an inconsequential nature. This in itself, of course, cannot be reason enough for rejecting it. But on the other hand a case can only be made out for the weaker claim if it can either be shown that the stronger claims of the first view is "too strong" (i.e. it is unmaintainable) or that the empirical consequences of adopting one position rather than the other are not significantly different.

It can, of course, also be argued that the putative difference between the first and the second view is "illusory": they represent two faces of the same coin. This possibility cannot admittedly be dismissed off hand, but one must hasten to add that there is not much, if anything, in the literature

which serves to dispel this "illusion". Moreover, it is difficult to see how "logically different categories" can be identical at any meaningful level of representation.

The immediate consequence of relegating the study of use to the realm of performance - and insulating the study of competence from any kind of interaction with actual use - would result in forsaking the very stick which Chomsky used to beat behaviourist psychology with. "The creative aspect of language" on which so many linguists and philosophers of language had been crucified is only an abbreviated form of "the creative aspect of language use" (Chomsky (1965:6)). Chomsky (1975:56) is quite aware that this kind of insulation against actual use can render his own brand of linguistics vulnerable to the kind of arguments he had so effectively used against behaviourist approaches to language study. "... I do not hold that the 'essential thing about languages is their structure'. I have frequently described what I have called 'the creative use of language' as an essential feature, no less than the distinctive structural properties of language. Study of structure, use and acquisition may be expected to provide insight into essential features of language" (italics mine).

The clarification that Chomsky provides here strongly suggests that over the years he has conclusively opted for what we have called the first view. This seems

to be reasonably clear - because this view which seems to assign importance "no less than the distinctive structural properties of language" to use cannot, presumably conceive of a generative grammar's resting satisfied with "simply" assigning structural descriptions to the sentences it generates, unless, of course, one takes the stand that the grammar that "the descriptive study of language constructs" has a component which is distinct and independent of the generative grammar which only assigns structural descriptions.

This impoverished and overly mechanical view of "Generative Grammars", which in effect, reduces the "creative aspect of language" to mere syntactic recursion, poses problems for the construction of a theory of language acquisition which to Chomsky (1965:27) is necessary for "internal justification" and "explanatory adequacy". One of the major criticisms of the acquisition model presented in Chomsky (1965:30ff) is that the generative grammar it envisages does not need to verify the correctness of the Structural Descriptions it provides against actual use to which the generated sentences are put (for details see Fodor, Bever, Garrett (1974:469ff)). For instance, what is to prevent a generative grammar from assigning the features imperative to the Structural Description of the sentence "How's the wife and kids" - if it is not regulated by actual use in concrete situations?

It is interesting to note that Chomsky who had attached great importance to use and appropriateness in 1963, should have suddenly lost sight of it in 1965 - only to regain it in 1966 and 1968. In 1970 he seems to be drifting the 1965 view. By 1975, however, he seems to have conclusively opted for the view that the study of use is as essential a feature of language (and therefore an integral part of grammar proper) as the study of the structure of language. He is even willing to admit that the theory of speech acts and communication intention has provided valuable insight into the study of semantics. "My objection to the theory of speech acts, as it has so far been developed, are basically those just stated: it may help to analyze communication, and it has led to interesting discoveries about semantic properties of utterances"¹ (Chomsky (1975:73; italics mine).

This vacillation in Chomsky is not entirely surprising; in fact, in hindsight it seems quite predictable. When Chomsky sought to adumbrate the Standard Model (1965) i.e. the interpretative model - he was trying as far as possible to underplay the importance of the study of use in grammar proper.² In 1970 when he decided to join the fray in defense of the interpretative model (albeit in a modified form) - he was once again forced into this untenable position of viewing grammar as completely insulated against and

incompatible with the study of use in appropriate situations. Our suspicion that this insulated study of competence is a theoretical consequence of his choice of the Generative Syntactic model is confirmed when we see Katz and Postal (1964: 166-7) make a clean breast of it: "The syntactic component, which is the generative source for the whole linguistic description, enumerates the infinite set of sentoids in an order and in a way that must be considered essentially random from the viewpoint of actual speech production and comprehension. The phonological and semantic components cannot change this fact, because they are merely interpretative devices which assign interpretations to sentoids in whatever order those sentoids are given to them by the syntactic component. Therefore, within the framework of a linguistic description, there is no provision for describing how speakers equipped with a linguistic description of their language can extract from it just the sentences they wish to produce and just the analysis required to understand the sentences produced by others. The systematic description of these abilities is the province of what can be called "models of speech production" and "models of speech recognition" (*italics mine*).

In one sweeping statement we are unambiguously informed that generative grammars have nothing to do with the properties of "coherence" and "appropriateness"; is not interested in the native speaker's "ability to produce" or

"to comprehend" "novel utterances" "on appropriate occasions" and in short what it "generates" is no different from "the ravings of a mad man or a computer with a random element".

Empirical consequences: Doubts having been raised about the viability of the interpretative model on theoretical grounds, it would clinch the issue of it could be shown that the empirical consequences of adopting the first view is significantly different from those arising out of the adoption of the second view. That is to say that it would be necessary to show:

- 1) the claims made are significantly different
- 2) the significance is linguistic
- 3) the "stronger" claims are maintainable
- 4) that in trying to "account for" a larger amount of data methodological rigour has not been sacrificed.

Significant difference: This condition would be satisfied if it could be shown that a generative model (as opposed to an interpretative model) can account for use (under the aforesaid idealization) in some non-trivial manner. It would be more satisfying if it could be shown that the interpretative model cannot "account for" the same data in the same or atleast in a similarly significant manner with the mechanisms that it has at its command. In short, unless the model gives up certain basic assumptions adjustments in analytical techniques will be of no significant help. All this must be done to

pre-empt the possibility of the generative model being dismissed a "notational variant".

Linguistic significance: The entire effort of Katz and Fodor (1964), Katz (1966) and Katz and Bever (1974) to distinguish between the "linguistic" and the "non-linguistic" seems to evade crucial issues. Since grammar accounts for linguistic data anything it cannot account for or choses to ignore is by definition "non-linguistic" and can conveniently be swept underneath the carpet of either "knowledge of the world" or "performance factors". Katz and Bever (1974) recognize the essential circularity of the argument in a similar case: a grammar G of language L generates all and only the sentences of L ; if any sentence S is not generated by G then S is not a sentence of L . But how is one to know that the candidate grammar G_1 is indeed the correct grammar of L and the sentence S which it does not generate is not a sentence of L ? That is, there must be an independent method of verifying whether S is a sentence of L without having to refer it to the grammar G_1 which is being tested for its adequacy. It would seem, then, that there is no escape from empirical verification.

Similarly, there is no apriori method of deciding whether a particular feature is a linguistic feature. Suppose a grammar G_2 claims that feature F is a linguistic feature and demonstrates that by incorporating this feature into its descriptive machinery it can account for the

structure of sentence S then it is observationally a more adequate grammar than G_1 which claims that feature F is non-linguistic and which is concurrently unable to explain the structure of sentence S . This is to say that the problem concerning the status of feature F can only be resolved when competing grammars have been evaluated for adequacy. If G_2 incorporates a feature F and is found to be more adequate than G_1 (which claims that F is non-linguistic) then, there is no reason to believe that feature F is non-linguistic.

The case for the incorporation of feature F is further strengthened if it is found that this feature can also be utilized to apprehend and to account for the structure of sentences $S_1 S_2 \dots S_n$ and to provide for a more precise semantic interpretation of these sentences. That is to say that the area of applicability of this feature is wide and extensive. If further it can be shown that the feature F provides intuitively satisfying explanations in different areas and in different languages, then, the grammar G_2 which incorporates this feature can claim to be a more descriptively and explanatorily adequate grammar than G_1 .

Maintainability: The attack that Katz and Bever (1974) mount on G. Lakoff's notion of "relative well-formedness" appears quite convincing because this particular notion of Lakoff's does indeed introduce a lot of indeterminacy in the grammar, making the distinction between the "grammatical"

and the "ungrammatical", "fuzzy" and the notion of "grammaticality", contingent on the beliefs and presuppositions of individual speakers.

The specific objections can broadly be subsumed under the following heads:

1) The notion of "relative well-formedness" obscures if not totally obliterates the distinction between "grammatical" and "ungrammatical" to the extent that

2) the grammar is powerless to determine the status of a sentence till it has evaluated each sentence with respect to the beliefs of individual speakers and the cultural mores of the particular speech community.

3) A grammar envisaged by Lakoff's work, quite apart from these objections, would be so forbiddingly complex that it could never be "constructed".

These points though well taken in the context of the particular work cannot be arbitrarily extended to all and any semantic-pragmatic approach to language. For instance, none of these objections will hold against a grammar G_2 (which incorporates a pragmatic feature F) if G_2 does not obscure the distinction between the grammatical and the ungrammatical. Neither will these objections hold if reference is not made to the beliefs of individual speakers or the cultural mores of particular communities. In short, if generalizations can be captured and semantic interpretation can be made more

precise with the help of feature F of grammar G_2 - then G_2 cannot be dismissed simply because one of its features i.e. F refers to the attitude of the speaker.

Methodological rigour: The recent spurt in semantic analysis and the increasing preoccupation with speech acts and communication intention is unfortunately not matched by a corresponding concern for the underlying unifying theory. New and fresh claims continue to be made but no explicit mention is made as to how these 'insights' are to be made use of and how they are to be handled by the mechanisms known to be available in the grammar. The extension of the scope of grammar in this fashion gives the impression of being indiscriminate and ill-advised because ad hoc devices are employed with impunity and no concern is shown either for precision or for the explicit statement of rules.

While this is true, an analysis which does not suffer from this kind of vagueness of conception and ad hoc implementation, which shows concern for the general theoretical framework and states its conclusions in terms intelligible within the framework cannot be faulted merely because it does not adopt the overly formal "rule-format" of the interpretative model.

To dismiss attempts to incorporate any new feature into the grammar with the argument that it tends to complicate the grammar can be very self-defeating. The desirability of the

incorporation of any feature must be weighed with respect to its utility and its explanatory power and the overall effect it has on the theory. There must be a healthy interaction between theory and practice: just as the theory charts the path that practice must pursue - a theory must have the flexibility to revamp and rework itself wherever it comes across empirical data of a kind which was not envisioned earlier.

(2)

The present study attempts to examine evidence of the kind which would demonstrate that a generative (semantics) model is significantly different from the interpretative (semantics) model. It will try to show that arbitrary exclusion of the study of use from the grammar - a theoretical consequence of the interpretative model - often raises more problems than it presumably answers. It will try to show that insulating grammar from any kind interaction with the actual use to which sentences are put often confronts the grammar with acute embarrassment. The grammar is left with no more than two choices, both equally perverse. The grammar must either obdurately maintain that a certain phenomenon does not exist even though it is intuitively clear to native speakers that it does, or shrug it off with the argument that the phenomenon is "inferential", calls for "knowledge of the world" and therefore not within the scope of generative grammars.

On the contrary a generative model which takes use in its stride faces the same problems without any diffidence and very often provides "explanations" in a way which is inconceivable in the interpretative model.

We intend to argue that a certain aspect of pragmatics viz. "speaker attitude" has definite and definable syntactic and semantic consequences we will seek to demonstrate that any semantic interpretation in these areas remains incomplete and inadequate if the attitude of the speaker is not taken into account, implying thereby that this aspect of pragmatics is an essential component of the language capacity of human beings. We will further attempt to show that this aspect is analyzable i.e. viable patterns can be shown to exist in this domain. An attempt will also be made to examine the same data from the semantic and the syntactic points of view in order to show that a pragmatic approach is superior inasmuch as it is observationally and descriptively more adequate. Evidence will be presented to show that the pragmatic approach goes beyond observation and description and has the ability to provide explanations at various places i.e. this study will not be satisfied with merely asking "what" but very often will sally into the realm of "why".

Whenever possible — data from two other languages Bengali and Hindi will be examined to determine whether the rules formulated are language specific or are of a more general nature.

The second chapter will re-examine the question of NEG-RAISING — a problem that has tantalized and teased the ingenuity and analytical acumen of linguists and philosophers alike for many years now, but a question which till today continues to baffle all students of language. The third chapter revisits FACTIVES and examines the basic insight provided by Kiparsky and Kiparsky (1971) in the light of more recent literature and attempts to take the discussion a few steps further in the direction in which the solution might ultimately lie. The fourth and the fifth chapters will deal with IMPERATIVES in Bengali and PERSONAL PRONOUNS in Bengali and Hindi respectively. In these two chapters we show that some particles appear regularly in Hindi and Bengali which cannot be generated by the syntactic component, and the question of their being interpreted by the semantic component of the interpretative model therefore does not even arise.

We maintain that knowledge of the pronominal forms and the concomitant verb inflexions are an essential part of the intrinsic competence of the native speakers of these languages — a generative grammar, therefore, cannot escape from the task of generating them. If the grammar were to be exempted from the "appropriateness" requirement — it would not be able to generate them at all — which should be reason enough for referring to use without hesitation.

The particles in imperative utterances constitute an interesting dimension in the "communication intention" vs "formal semantics" controversy. What Strawson (1971) calls a "Homeric struggle" is hardly more than a question of emphasis. Communication-intention theorists in spite of all the claims they make about the necessity of defining meaning solely in terms of communication intention, do not deny the existence of a level of "locutionary" meaning (Austin), or "word meaning" and "sentence meaning" (Grice) or "propositional" meaning (Searle) which is the input to the "utterer's meaning" or the "illocutionary mode". On the other hand, we have already seen that Chomsky has nothing against the theory of communication intention theory per se (Chomsky (1975:73)). He further concedes that ".... suppose that Searle and Strawson can distinguish a promise from a warning or a prediction or a threat. Then the results will be of immediate interest to the most unregenerate exponent of 'abstract meaning'" (Chomsky (1975:65)). We propose to argue that the non-semantic particles in Hindi and Bengali imperative utterances – precisely serve the function of distinguishing between threats, orders, requests, cajoling etc.³

We propose to argue that a grammar which incorporates a pragmatic feature "speaker attitude" in its descriptive machinery is more adequate inasmuch as it serves to "explain" the phenomenon of NEG-RAISE and FACTIVES; it can generate

the pronominal forms and the corresponding verbal inflexions in register languages as also the particles in imperative utterances and thereby distinguish between a command, a request etc. And all this can be bought at a minimal price: contingent conditions for the incorporation of this feature are neither vague nor ill-defined; and it does not require reference to any kind of specific knowledge about individual speakers or the belief systems of individuals or particular communities. It only requires grammar to take cognizance of the fact that speakers have attitudes to propositions (which accounts for Neg-raising and Factivity) or attitudes towards the addressee (which accounts for the register inflexions and the difference between imperative types). If the speaker's attitude is that of absolute confidence, what he asserts is a factive; if he is diffident, if he hedges - the consequent weak assertion allows Neg-raising. Similarly if the attitude of the speaker is that of deference towards the addressee (because of his socially predetermined weaker position) then he uses the honorific register, otherwise not. When the speaker's attitude towards the addressee is that of menace, he threatens, when the attitude is authoritative he orders or he commands and when his attitude stems from a relatively weak position he requests, he begs, he implores etc. The distinction in the imperative utterances is both necessary and desirable - because only then can the particles be

"generated" and "interpreted"; further the distinction serves to explain why only a sub-set of these utterances have a meaning preserving "or transform".

For the purposes of this work we have sought to incorporate pragmatics as a subcomponent of semantics — and yet we have called the feature "speaker attitude" a pragmatic feature (in the fashion of Morris and Carnap). This has been done to sharply distinguish this feature from the kind of features Katz and Fodor and TG linguists in general have proposed for semantic analyses so far. A further reason for calling this feature a pragmatic feature has been motivated by our awareness that it is possible to make a much stronger claim. That is, the pragmatic component is distinct from and independent of the semantic component and, indeed, that this component controls the entire linguistic description ("Pragmatics is the basis for all linguistics" or "descriptive semantics and syntax are strictly speaking parts of pragmatics", Carnap (1942:13)). Hymes (1971:278) puts it in more familiar terms: "just as rules of syntax can control aspects of phonology, and just as semantic rules perhaps control aspects of syntax, so rules of speech acts enter as a controlling factor for linguistic form as a whole".

We have felt that until further explorations are carried out it might not be possible to formalize this approach without sacrificing methodological rigour.

At present we see no serious problems in incorporating the information concerning the attitude of the speaker by an additional node in the semantic deep structure of the Generative Semantics model. The Generative Syntactic model, however, cannot incorporate features of this kind in any non-ad hoc way or without doing serious damage to the overall structure of the theory. We propose to show this when we take up each case for detailed study.

CHAPTER II

NEG-RAISE

NEG-RAISING has engaged the attention of linguists and philosophers for quite sometime now. Jespersen (1908), Fillmore (1963), Klima (1964), the Lakoffs (G. Lakoff (1970); R. Lakoff (1968, 1969)), Lindholm (1969), Per Lsvag (1975) and Prince (1976) have attempted to tackle this problem from various angles - but the conclusion inevitably seems to point to the same discouraging direction - namely that NEG-RAISING is a minor rule (in the sense of G. Lakoff (1970) applying only to a handful of verbs and one needs to resort to lexical markings if this transformation is to be incorporated into the grammar. The philosopher Quine (1960) referred to this phenomenon as "the familiar quirk of English".

Bolinger is credited by the Lakoffs as pointing out that NEG-TRANSPORTATION is not at least a meaning - preserving transformation in the sense of (once firmly accepted but now increasingly disfavoured) the Katz-Postal hypothesis. But this discovery, like many others, is not entirely original. The TG linguist's "Eureka" in this case, as in so many other cases, betrays over-enthusiasm as well as surprising ignorance (real or professed) of past classical work. Just as Fillmore (1963) echoes Jespersen (1908) with respect to this problem, Bolinger's contention is a restatement of Poutsma (1928) who

had said that the transported reading is weaker than the non-transported congener.

Hintikka (1962) proposed what might be called the "uncertainty principle" — that is, in this set of verbs not that p has a reading in which it is synonymous with that not p. Putting it differently, one might say that the distinction between 'not belief' and 'disbelief' is blurred. Jackendoff (1971) suggests that the synonymy is inferential and has nothing to do with the syntactic component, perhaps not much with the semantic component either.

If one ignores the strength (or the weakness) of the assertion in the two sentences of the pair, as indeed has been done throughout in the TG analysis of NEG-RAISING¹, one is confronted with a situation where no solution seems to be anywhere in sight. On the other hand, laying too much emphasis on the difference of meaning between the transported and the non-transported readings is to wish the problem away. For, it is true that at least in one reading the pair-mates are synonymous or tend to be used interchangeably by speakers of not only English — but many other languages as well.

Syntactic Analysis: What might strictly be called (generative) syntactic analysis has confined itself to the task of determining the position of the NEG in the deep structure of sentences. That is, given two near synonymous sentences (in one reading):

(1) John thinks that Bill doesn't like Jane.

(2) John doesn't think that Bill likes Jane.

Where does the NEG originate – in the matrix or the embedded, clause? Put differently, is (1) or (2) closer to the base? Fillmore, even though he had no syntactic evidence to support his claim, felt that the NEG originated in the lower clause and was transported to the higher clause without any significant change in the meaning of the sentence.

It is interesting to note here that Fillmore's (1963) work which succeeded Chomsky (1957) already anticipated Katz and Postal (1964). The unmistakable implication of Fillmore (1963) is that the NEG is no more transformationally introduced – but already exists at some underlying level – which is closer to (1) than to (2). Kajita (quoted in R. Lakoff (1969)) and Robin Lakoff have sought to provide syntactic evidence in support of Fillmore's contention that the NEG originates in the embedded clause. This is sought to be done by showing that negative polarity items like until and lift a finger require that the verb immediately above them must be in the negative for sentences to be grammatical:

(3) I think John will not leave until tomorrow.

(4) I don't think John will leave until tomorrow.

(5) I said John wouldn't leave until tomorrow.

(6) *I didn't say John would leave until tomorrow.

(7) I think he won't lift a finger to help you.

(8) *I don't think he will lift a finger to help you.

Klima's (1964) argument that NEG appears both in the matrix and the embedded clauses and a NEG-ABSORPTION rule "absorbs" or otherwise erases the embedded NEG was never seriously considered because it would endanger the hypothesis that semantic interpretation is uniquely determined at the level of the "initial phrase-marker". Given Klima's formulation, (3) and (4), (which are paraphrases of one another) would have two distinct deep structures:

I neg-think (John-neg-will-leave-until-tomorrow)_{comp}

-I think (John-neg-will-leave-until-tomorrow)_{comp}

The tacit conspiracy to ignore Klima's formulation (because of its discomfoting implications) is reflected by the fact that two sentences Klima cited in support of his formulation have not received much attention in recent literature:

- (9) She is too weak to have another child until after the operation.
- (10) Scarcely anybody expected him to get there until after tea.

This indeterminacy is, in a large measure, due to the serious imbalance in the standard model. Any two sentences which we intuitively feel to be synonymous must be shown as having identical syntactic (deep) structures. That is, synonymy, which is undoubtedly a semantic relationship, cannot be handled by means of semantic interpretation rules.

As a result, synonymy which is non-structural cannot be admitted as synonymy at all. Bar-Hillel (1970) and Leech (1969) quite naturally, therefore, have dismissed the KF semantic component as being too hopelessly inadequate to deserve a place in an integrated theory of linguistic descriptions.

Conversely, if there was some provision for tackling synonymy purely at the semantic level – then the question could be settled in one way or the other. If we could show, for instance, that (3) includes the meaning of (4), but (4) cannot include the meaning of (3) then we would have a basis for deciding whether (3) underlies (4) or (4) underlies (3) – or a double NEG (both in the matrix clause and in the embedded clause – a'la Klima) underlies both (3) and (4). But this possibility is clearly ruled out in the standard model: if (3) underlies (4) then only (3) receives a semantic interpretation but not (4) because (4) is a derived phrase marker (which has undergone the NEG-TRANSPORTATION transformation). The standard model does not permit the semantic component to operate on derived phrase-markers².

Jackendoff's (1972) model which makes the entire T-marker the input to the semantic component, that is, the semantic component is allowed to operate at each stage of derivation – is better equipped to deal with this problem. But Jackendoff refuses to grapple with this problem – by dismissing this synonymy as being inferential rather than

syntactic or semantic. Even if Jackendoff thought otherwise, the effort would have been futile because, as we show later, this synonymy is contingent on considerations, which though they are rule-governed and regular, are 'pragmatic' rather than syntactic or semantic. Robin Lakoff (1969) proposed a criterion to account for this kind of non-structural synonymy which is clearly beyond the semantic component envisaged by Katz and Fodor: if (3) and (4) are synonymous — then it could never be the case that (3) was true but (4) was false or vice-versa.

Given this definition of synonymy it is easy to see why (3) must underlie (4) but not vice-versa. But once this criterion is accepted, the very motivation for positing a common deep structure for (3) and (4) is lost, consequently the whole question of where the NEG originates loses much of its importance. There is a clear necessity for mechanisms of the sort proposed by Robin Lakoff — to take care of situations where our intuitions do not appear to be entirely clear or reliable. Fillmore (1972), discusses this problem in some detail; even Chomsky (1957) foresaw this possibility when he enunciated his "clear case methodology".

Getting bogged down in peripheral issues in this way was in some respects a consequence of allowing an empirical hypothesis (synonymous sentences have identical deep structures) to become a constraint on the theory. The question of

determining the position of the NEG became so crucial that the discussion could not proceed much further. (The entire energy seems to have become wasted in reducing a palpably non-structural symmetry to a structural one). The real reason, however, which prevented a generative syntactic analysis from solving the problem of NEG-RAISE was that it studiously avoided studying use. The solution would have been less elusive if one could examine the situations in which (3) and (4) are used. This could shed light on the problem when and why (3) and (4) tend to be treated as synonyms in spite of their distinct syntactic difference.

Not surprisingly, therefore, the linguist was forced to give up his search for generalizations and opt for minor rules and lexical markings. Lindholm (1969) clearly noticed that there were two thinks (or two uses of the same lexical item): one which pronominalizes a sentential complement with IT and the other with SO:

- [illegible]

Yet he had to concede that "Negative-raising, . or not-transportation is a minor rule which is undergone by a small class of exceptional verbs as think, believe, except, guess, seem and want". Per Isvag (1975) developing on the

findings of Lindholm (1969) concluded that the two thinks have different derivational sources - but still there was no definite indication why a particular think behaved in the way that it did with regard to NEG-RAISING. Robin Lakoff (1969) attempted a generalization of sorts - she classified them as "a small number of a sub-class of verbs - non-factive verbs of mental state and one or two transitives". But since the theory had no way of incorporating this kind of classification she had to concede that NEG-RAISING was a minor rule.

Resorting to lexical markings and incorporating minor rules in a grammar do not, perhaps, reflect a very happy state of affairs, for they amount to a tacit admission that some generalization is missing. This apprehension deepens when one finds that the phenomenon of NEG-RAISE is not confined to a set of unruly, delinquent verbs of English (a'la Quine) - but they seem to cut across language boundaries. Robin Lakoff (1968) has found evidence for it in Latin, Per Lsvag (1975), in Norwegian, Prince (1976), in French; we should like to show that NEG-RAISE has camp followers in Bengali as well. These delinquent verbs, then, if they are delinquent at all, constitute quite a formidable international gang. Moreover, the NEG-RAISERS do, indeed, seem to belong to a natural class in as much as they are subject to the same kind of restrictions and to the same kind of rules.

Syntactic Evidence:

- (13) I think he won't come.
- (14) I don't think he will come.
- (15) I expect him not to come.
- (16) I don't expect him to come.
- (17) I believe he won't come.
- (18) I don't believe he will come.
- (19) I suppose he won't come.
- (20) I don't suppose he will come.
- (21) I feel that he won't come.
- (22) I don't feel that he will come.
- (23) aami mone kori she aashbenaa³
 I think do he come (future) not
 I think he won't come.
- (24) aami mone korinaa she aashbe
 I think do not he come (future)
 I don't think he will come.
- (25) māi sochtaa hūu kī voh nahi ayegaa⁴
 I think (present) that he not come (future)
 I think he won't come.
- (26) māi nahi sochtaa hūu kī voh ayegaa
 I not think (present) that he come (future)
 I don't think he will come.

Sentences (11) and (12) suggest that there are two kinds of think (and perhaps two kinds of believe, expect,

suppose etc.) – and it is possible that one of these allows NEG-RAISE. This suspicion is confirmed when we examine the examples from Bengali. In Bengali, think in the sense of "cerebration" is bhabi or chinta kori and think in the sense in the "be of the opinion that S" is mone kori. Sentences (23) and (24) make it clear that more kori allows NEG-RAISING – but bhabi or chinta kori apart from disallowing NEG-RAISE, raise a lot of other interesting questions too:

(27) *aami bhabi o aashbenaa

I think (present) he come (future) not

(28) *aami bhabinaa o aashbe

I think (present) not he come (future)

(29) *aami chintaa kori o aashbenaa

I think do he come (future) not

(30) *aami chintaa korinaa o aashbe

I think (present) do not he come (future).

One of the ways of making (27) and (29)

grammatical is to change the aspect to continuous and convert the THAT complement to a WH complement

(31) aami bhabchi o aashbe kinaa

I think (present continuous) he come (future) whether or not

(32) aami bhabchi o aashchhenaa kænno

I think (present continuous) he come (present continuous)

why

I am thinking why he isn't coming.

(33) aami chintaa korchhi o aashchhenaa kænno

I think do (present continuous) he come (present continuous)
not why

I am thinking why he isn't coming.

(34) aami chintaa korchhi o ashbe kina

I think do (present continuous) he come (future) whether
or not

I am thinking whether he will come.

(28) and (30) cannot be made grammatical even in this way:

(35) *aami bhabchhinaa o aashbe kinaa

(36) *aami chintaa korchhinaa o kænno aashchhenaa

(37) *aami bhabchhinaa o aashchhenaa kænno

(38) *aami chintaa korchhinaa o aashbe kina

The pattern that seems to be emerging is that the
(Bengali) think in the "be of the opinion that S" sense cannot
co-occur with the progressive aspect and/or with WH complements:

(39) *aami mone korchhinaa she aashbe

I think do (present continuous) not he come (future)

(40) *aami mone korchhi she aashbenaa

I think do (present continuous) he come not (future)

(41) *aami mone korchhi she aashbe kinaa

I think do (present continuous) he come (future)
whether not

(42) *aami mone korchhi she aashbenaa kænno

I think do (present continuous) he come not (future) why

whereas think in the sense of "cerebration"⁵ occurs more naturally in these environments (31-34). In English, too, the situation is somewhat similar:

(43) John thinks that Mary is crazy.

(44) *John is thinking that Mary is crazy.

(45) I can't think why she left the party in a huff.

(46) I am thinking what I should do.

Lindholm suspects that there are two believes too.

(47) Was Caesar a Jew? I believe ^{so}
*it

(48) The evidence that neg-raising is cyclic is so convincing
that I now believe ^{it}
*so

This is to say that there are two believes: one in "be of the opinion that S" and another in the non be of the opinion sense and they are subject to the same kind of restrictions:

(49) *I am believing that Mary is crazy.

(50) More and more people are now believing that neg-raising
is cyclic.

(51) I believe what he says.

An objection may, however, be raised here. How do we know that think in (45) and (46) can only be interpreted in the non "be of the opinion that S" sense? Are we justified in burdening our semantic intuitions to this extent? What we have done here is to rely on our semantic intuitions - but we have adduced indirect circumstantial syntactic evidence to

corroborate our semantic intuitions. That is, we have tried to show that the two thinks in Bengali have two distinct lexical realizations: one of which allows neg-raising and the other does not. Further, we have shown that the two thinks in Bengali are subject to different syntactic selectional restrictions i.e. the neg-raiser think does not allow use in the progressive aspect or co-occurrence with WH complements. Lindholm has produced syntactic evidence which leads us to suspect that there are two thinks (and two believes) in English too. We have also found that in English think and believe seem to be subject to similar kinds of selectional restrictions i.e. one think (and believe) allows the progressive aspect as well as WH complements and the other, does not. On the basis of the Bengali evidence which is very clear (in as much as the neg-raiser does not allow the progressive aspect or appear with WH complements) – we have sought to frame rules for the less clear cases in English and we have concluded that the think which does not allow WH complements etc. is the neg-raising think in English too. And this interpretation is in keeping with our semantic intuitions (see Appendix I for a more detailed analysis).

In Bengali a yes/no question cannot normally be answered with the non-neg-raiser think – unless it is meant as a rebuttal to the question:

(52) tumi ki mone koro brishti poRbe?

You what think do rain fall (future)

Do you think it will rain?

(53) aami mone korinaa brishti poRbe

I think do not rain fall (future)

I don't think it will rain.

(54) *aami bhabinaa/chintaa korinaa bristi poRbe

I think not rain fall (future)

(55) *aami bhabi/chintaa kori bristi poRbe

I think not rain fall (future)

Lindholm (1969) has argued persuasively and at length that it is the neg-raising, "be of the opinion that S" sense of these verbs which constitutes answers to yes/no questions; the Bengali evidence conclusively proves that it is so. We may, therefore, include SO and NOT sentence pronominalizations as syntactic features of neg-raisers:

(56) Do you think it is going to rain

	think	so
	believe	
I	expect	*it
	guess	
	suppose	not

		so
It seems	*it	
		not

The neg-raiser in Bengali is parenthetical (in the sense of Urmson (1956)):

(57) aamar mone hoe o aashbenaa

My mind in happen he come (future) not⁶

(58) o aashbenaa aamar mone hoe

He come (future) not my mind happens

He won't come, I think.

(59) *aamar bhabnaa hoe o aashbenaa

My thought happens he come (future) not

(60) *o aashbenaa aamar bhabnaa hoe

He come not (future) my thought not happen

In English:

(61) I think he won't come.

(62) He won't come, I think.

(63) I believe he won't come.

(64) He won't come, I believe.

(65) I guess he won't come.

(66) He won't come, I guess.

(67) I suppose he won't come.

(68) He won't come, I suppose.

(69) It seems he won't come.

(70) He won't come, it seems.

Recapitulating what we have said so far:

(1) Many languages have neg-raisers, this phenomena is, therefore, not a quirk of English.

(2) Neg-raisers seem to belong to the same natural class in as much as they share a number of syntactic characteristics⁷:

- they
- (a) do not take WH complements
 - (b) do not appear in the progressive aspect
 - (c) take SO sentence pronominalizer
 - (d) take NOT sentence pronominalizer
 - (e) constitute answers to yes/no questions
 - (f) are parenthetical verbs.

In the face of this evidence, it would be extremely unwise to resort to minor rules and lexical markings without making an earnest attempt to see whether any kind of regularity or patterning can be discovered. That is, ad hoc rules need not be resorted to till a genuine quest for generalizations has proved futile. Moreover, lexical markings amount to the construction of an inventory and shed no light whatsoever on the processes involved. And yet the professed aim of Transformational Generative Grammar is to study processes and not to remain satisfied with arranging items.

The advocates of the interpretative model might like to argue that structural symmetry (same DS) and lexical identity, though they are sufficient conditions for synonymy were never visualized as necessary conditions for synonymy. And synonymy of this kind may be taken care of by Semantic Interpretation Rules. This argument has drawbacks, the most crucial one being that the Semantic Component - as Katz and Fodor (1964) or Katz (1971) sees it - has no Semantic Interpretation Rules as such. This is made clear in the

footnote on page 298 of Katz (1971) – the Semantic Interpretation that a sentence receives is the output of the projection rules. And we must remember that the projection rules are essentially "compositional" and additive in nature; that is, they emerge from the assumption that the whole is the sum of the parts. For projection rules of this kind, dependence on the syntactic structure and/or syntactic categorization is absolutely essential. Unless the syntactic Deep Structure tells us that the syntactic categorization for Venetian Blind is different from that of Blind Venetian – the additive, compositional projection rules are powerless to make the distinction. Given the additive assumption, $1 + 2 + 3$ and $1 + 3 + 2$ are bound to receive an identical interpretation i.e. 6 – but this is precisely what does not happen in the case of NEG-RAISE. If we take the position that the NEG-TRANSPORTATION introduces a significant change in the syntactic structure and/or syntactic categorization, then the non-synonymy of sentence pairs with non-neg-raisers is easily explained but we are stuck with the neg-raisers. Conversely if we take the position that NEG-TRANSPORTATION does not involve change in the syntactic structure and/or syntactic categorization (and NEG-TRANSPORTATION is essentially the same kind of operation which rewrites $1 + 2 + 3$ as $1 + 3 + 2$) then we have a natural explanation for neg-raising – but none for the non-synonymy of sentence pairs with non-neg-raising verbs. We have, thus,

no other way but to lexically mark the neg-raisers as permitting a neg-transportation (which is of necessity a meaning preserving) transformation.

Katz and Bever (1974) admit that the semantic interpretation rules constitute the weakest point of TGG and they envisage the necessity for the incorporation of rules which would take care of different kinds of synonymy notably in sentences like George is a bachelor and George is a human and an adult and an unmarried person to boot. But what is revealing is that even the envisaged enrichment does not go beyond synonymy based on lexical identity: one reading for bachelor precisely has the features

+human	.	This
+adult		
-married		

cannot be considered an oversight for Katz (1971) gives examples of only two kinds of synonymy, one based on structural symmetry

Eye doctors eye blondes

Blondes are eyed by eye-doctors

and the other on lexical relationship

Eye doctors eye blonds

Oculists eye blondes

(were the synonymy is a function of the identity of features that constitute the lexical items eye doctors and oculists).

Katz and Bever realize that the accounting for sentences like these themselves "would be extremely complicated"

(page 17) - it would not therefore be unfair to be sceptical about the possibility of formulating rules which could account for synonymy which is of an entirely different nature and of an immensely more complicated kind.

The basic defect of this kind of a semantic theory is that the notion of paraphrase is very loosely defined and even involves a kind of circularity (for details see Harris (1973:109)). And it is precisely this vagueness about the semantic relationship (between sentences) called synonymy which is the source of all troubles. What does it mean to say that sentence S_1 is a paraphrase of S_2 ? Robin Lakoff (1969) suggests that it means to say that it can never be the case that S_1 is true but S_2 is false or vice-versa. She takes the straightforward truth condition formula - which in effect removes the necessity of persisting with the syntactical explication (even Katz and Bever admit that with the formulation of the requisite kind of Semantic Interpretation Rules the motivation for the syntactical explication will be completely eroded). Others who would persist with the syntactic explication seem to indirectly imply that to say that S_1 is a paraphrase of S_2 is to say that S_1 and S_2 have the same Syntactic Deep Structure or they only differ in items whose symmetry can be established on semantic grounds. They thus see no distinction between the metalinguistic concept of paraphrase and its structural/semantic realization.

Semantic Analysis: A semantic analysis, if it were possible, would be more persuasive on two counts at the level of explanatory adequacy. Firstly, semantics being of a more universal nature would be better equipped to capture generalizations which are universal; a search for linguistic universals could be made with greater assurance. Secondly, if it could do away with lexical markings and minor rules or even considerably reduce the areas in which the expedient methods need to be invoked it would lead to a simplification of the grammar.

In the previous section we have tried to argue that it is a particular sense of think which allows neg-raise (the "indeterminacy" in English being removed with the aid of the clear case in Bengali); we also find that (nearly) all the verbs which allow neg-raise - think, believe, guess, suppose, expect, seem - have a meaning component which is common to them all i.e. "be of the opinion that S".

(71) My wife is of the opinion that all linguists are crazy
 and I think so too.
 believe
 expect
 guess
 suppose ,

(72) aamar bouer mote shob bhashaa totto bidrai
 paagol, aamar o taai mone hoe
 aamio taai mone kori

(72) is a good enough paraphrase of all the four sentences in (71).

Moreover, the dictionary confirms that think and believe have a meaning be of the opinion; expect has a meaning think or believe (the only common meaning that think and believe share is be of the opinion); guess has a meaning form an opinion; suppose also has a meaning guess and think (and the only common meaning that guess and think have is be of the opinion).

We have also argued that ^{the} Bengali neg-raiser unmistakably has the interpretation "be of the opinion that S" and that the non be of the opinion that S sense of the English think is realized as bhabchi or chintakorchi in Bengali and these neither allow neg-raising nor share the syntactic features which is common to the Bengali neg-raiser as well as to one reading of the English verbs think, believe, suppose, guess, expect, seem etc.

From this a hypothesis could be put forward that it is the common semantic element "be of the opinion that S" - that binds the neg-raising verbs into a homogenous class. A generalization has been arrived at and it is explicit as well as falsifiable. Even if we hesitate to give our semantic intuitions the status of proofs - a hypothesis nevertheless can be put forward that predicts that if a verb has a meaning "be of the opinion that S" - it will allow neg-raising and it will share certain syntactic features atleast in that reading. The power of a theory need not lie in the proofs it adduces, but in the explanation it provides and the predictions it makes.

The hypothesis would be more satisfying if it could make a prediction of the kind that all and only "be of the opinion that S" verbs allow neg-raise. Although the data confirm that all "be of the opinion that S" verbs are neg-raisers, it is silent about the only criteria; want which does not have this meaning allows neg-raising. Even then, this hypothesis is a stronger candidate than the apparently defeatist lexicalist hypothesis because, in effect, the semantic hypothesis requires that only want be lexically marked for this transformation; the other neg-raisers in English and Bengali can be subsumed under a single semantic class. Robin Lakoff (1968) contended that in Latin the neg-raisers correspond to the same semantic class as the English neg-raisers: "In Latin we find the same phenomenon restricted to the same semantic class" (page 120). She did not, however, make any attempt to demarcate this class. The semantic hypothesis may be seen to fill this void.

G. Lakoff's Objection: George Lakoff (1970a) in a long footnote has argued against semantic categorization of neg-raisers. His arguments can be reduced to four main ones:

- (a) Apart from the regular neg-raisers some speakers of English consider reckon and consider to be neg-raisers.
- (b) Want and desire belong to the same semantic field, yet want allows neg-raising but desire does not.
- (c) Hope is a neg-raiser in German but not in English.

(d) The information about the neg-raising transformation will need to be stated twice: once in the semantic component and again in the syntactic component.

The first objection is really no objection because reckon and consider both have a meaning "be of the opinion that S" in the dictionary; therefore the semantic hypothesis can be said to have made the correct prediction. The probable reason why some (but not all) speakers of English consider these verbs to be neg-raisers is that these verbs are somewhat more formal than the regular neg-raisers:

(73) I reckon Mary isn't crazy.

(74) I don't reckon Mary is crazy.

(75) I consider Mary isn't crazy.

(76) I don't consider Mary is crazy.

(73-76) certainly seem more stiff and formal than the sentences we have so far discussed; they are certainly not as freely in use as the regular neg-raisers.

The objection concerning want and desire has been met, albeit not fully satisfactorily, by marking want positively for this rule. Desire has been taken care of by the rule itself i.e. it is not an exception to the neg-raise rule. Lakoff's objection concerning the German hope is somewhat more complicated. The English hope has a subjunctive element which sets it off from the neg-raisers:

- (77) I hope it rains tomorrow.
 (78) *I think it rains tomorrow.
 (79) *I believe it rains tomorrow.
 (80) *I guess it rains tomorrow.
 (81) *I suppose it rains tomorrow.

(In Bengali and Hindi too hope does not allow neg-raising).
 Curiously hope shares some of the syntactic features of the neg-raisers:

- (82) Do you think you can come tomorrow?
 I hope so.
 (83) Do you think it will rain tomorrow?
 I hope not.
 (84) *I hope what happens.

Hope, however, is not a 'stative' verb like the neg-raisers and therefore not allergic to the progressive aspect:

- (85) I am hoping against hope that it won't rain tomorrow.
 All this shows that hope is pretty close to the neg-raisers and yet is not close enough. However, it could be that the German hope has some feature which is not shared by the English, Bengali and Hindi versions. This aspect, however remains unexplored.

As to the fourth objection, one is not too sure that Lakoff himself would like to persist with this objection after the formulation of a new model with which his name is now associated. The primary virtue of the Generative Semantics model is that it does away with the wasteful practice of having

a dictionary (in the semantic component) and a lexicon (in the syntactic component) with virtually the same kind of information. In the new model, semantics is seen to generate an abstract structure which, when acted upon by transformations, yield surface structures. The requisite information, therefore, needs to be stated only once: in the semantic deep structure of sentences.

Our Misgivings: The semantic hypothesis is definitely a better candidate than the defeatist lexicalist hypothesis which, as far as neg-raising is concerned, does not even attempt any kind of generalization. Nevertheless, the semantic hypothesis is not entirely satisfactory. Even if we agree with Sapir that "all grammars leak" and agree to treat want as a leak in this particular case, we cannot escape being left with a feeling of uneasiness. Even though the semantic hypothesis captures a generalization which can uniquely identify the neg-raisers, it does not go much beyond. That is, it does not indicate even vaguely why for these verbs that not p has a reading not that p; it rests satisfied in merely saying that it is so. The mystery of neg-raising continues to remain a mystery; all that has been achieved is to identify somewhat precisely the area over which the mystery extends.

Pragmatic Analysis: The attempts upto now have been to find a common denomination among the neg-raisers and thereby class them

into a homogeneous syntactic or semantic set. And it is evident that these attempts have not succeeded in any meaningful way. One could logically start out from the other end: that is try to classify the verbs which do not allow neg-raising and then classify the neg-raisers as a residual class as it were.

The verb which is epistemic par excellence is know. It has been pointed out that the verb know does not permit neg-raising:

(86) I know that he will not come.

(87) ?I don't know that he will come.

A point that has, perhaps, been missed is that (87) is somewhat deviant if not outright ungrammatical. And the native speaker need not be consulted over this, not that the native speaker's intuitions are likely to be any different from what is predicted. The reason that (87) must be treated as deviant is that it involves a kind of contradiction. Know, as has been agreed throughout in the literature, is a Factive verb⁸ (in the sense of Kiparsky and Kiparsky (1971)); which means, that the truth of ^{the} complement sentence is presupposed irrespective of whether the matrix verb is negated or questioned. That is to say in (88-90)

(88) You know that he would come.

(89) Did you know that he would come?

(90) You didn't know that he would come.

it is presupposed that he would come is true.

This being the case, can any speaker normally claim not to know something which is logically presupposed by what he says? In the face of this contradiction how is the speaker going to interpret the sentence in any sensible way?⁹ Know, however, does not resist the negative when the subject is other than the speaker himself.

(91) You don't know that Mary is crazy.

or when the verbs is not in the present tense.

(92) I didn't know that Mary is crazy.

or when the complement is a WH clause.

(93) I don't know whether Mary is crazy.

Know is not the only verb which does not co-occur with negatives as freely as other verbs. The verb think is subject to a similar kind of constraint. If think is used in the sense of "mental process" or "cerebration" then it cannot allow negation (subject to the conditions stated above). A sentence like (94) is anomolous in the intended sense

(94) I don't think that Mary is crazy.

The logical opposite of "thought" is "no thought" (i.e. absence of thought) and not "negative thought". Can one, therefore, say that one has no thought what one is speaking about? Speaking about something certainly implies thinking about it. (94) however, is not ungrammatical because think has another interpretation "be of the opinion that S" — which is not subject to this semantic constraint.¹⁰

This constraint affects all verbs of cognition in general; because logically a speaker may say that something was not in his cognition in the past or something is not in the cognition of somebody other than himself, but he may not say that something about which he is speaking is not in his cognition at the moment of speaking.¹¹ Robin Lakoff (1969) suggests that a sentence like (87) is ungrammatical because the verb is a performative and "it is as much nonsense to think of a negated performative as a questioned performative" (page 144). We cannot, however, accept this reasoning because we find that neg-raisers can be negated and we propose to suggest later that even neg-raisers are performatives. Moreover, we find that the negation constraint holds for only 'know-verbs' – but the question constraint spreads over the entire area of psychological verbs. As Palmer (1969:95) points out, mental verbs and sensation verbs are private in nature, and it is incongruous to ask others about one's own private states except in a rhetorical way. Thus (95-99) can only be interpreted as rhetorical questions:

(95) Do I think that Mary is crazy?

(96) Do I know that Mary is crazy?

(97) Do I regret having come to this place?

(98) Does my foot hurt?

(99) Do I see clouds in the sky?

We have called verbs like realize, discover, be aware, understand, find out etc. – "know-verbs" because know seems to

be a primitive in the semantic structure of all these verbs, and all these verbs seem to be subject to the same negation constraint

- (100) He realizes that John won't come.
- (101) He doesn't realize that John will come.
- (102) I realize that John won't come.
- (103) *I don't realize that John will come.
- (104) I didn't realize that John would come.
- (105) He understands that John won't come.
- (106) He doesn't understand that John will come.
- (107) I understand that John won't come.
- (108) *I don't understand that John will come.
- (109) I didn't understand that John would come.

A similar situation obtains in Bengali and Hindi:

- (110) aamī jaanī she aashbenaa

I know (present) he come (future) not

- (111) *aamī jaanī naa she aashbe

I know (present) not he come (future) .

- (112) aamī jaanī naa she aashbe kīnaa

I know (present) not he come (future) whether or not

- (113) aamī jaantaam naa she aashbe

I know (past) not he come (future)

- (114) she jaanenaa raam aashbe

He know (present) not Ram come (future)

- (115) māī nahī jaantaa voh aayegaa kī nahī

I not know (present) he come (future), whether not

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(116) *māi nahi jaantaa hūū voh aayegaa

I not know (present) he come (future)

(117) māi jaantaa hūū ki voh nahi aayegaa

I know (present) that he not come (future)

(118) māi nahi jaantaa thaa ki voh aayegaa

I not know (past) that he come (future)

(119) voh nahi jaantaa hai ki māiaaūngaa

He not know (present) that I come (future)

Austin (1961:67) points out that there is a performative aspect of the utterance "I know", it amounts to saying "I give others my word: I give others my authority ...". In other words it amounts to giving a guarantee. These verbs are strongly assertive even though only indirectly performative. We should like to take note of a couple of things before we pass on to the next set of verbs: (1) we have already found a reason why sentences like (27-30) must be ungrammatical and (2) that there is no synonymy-relationship between (120) and (121)

(120) He knows that Mary isn't crazy.

(121) He doesn't know that Mary is crazy.

In no situation could both (120) and (121) be true i.e. in (120) it is presupposed that Mary isn't crazy is true whereas in (121) it is the very reverse that is presupposed.

The next set of verbs co-occurs with negatives but the not that p form cannot be equated with the that not p form, however it is clear that the that not p form implies the

not that p form but not vice-versa. That is if that not p is true not that p cannot be false; but the truth of not that p does not presuppose the truth of that not p.

(122) I maintain that he is not clever.

(123) I don't maintain that he is clever.

This is to say that the implicational relationship is unidirectional (122-123). This kind of relationship exists for all say verbs i.e. admit, affirm, grant etc.

(124) I say that he is not clever.

(125) I don't say that he is clever.

Similarly in Bengali and Hindi - this kind of unidirectional relationship holds in the corresponding class of verbs:

(126) aamī bolchī je o chaalaak noy

I say (present) that he clever not

(127) aamī bolchīnaa je o chaalaak

I say (present) not that he clever

(128) māī kahtaa hūū kī voh chaalaak nahī hai

I say (present) that he clever not is

(129) māī ye nahī kahtaa hūū kī voh chaalaak hai

I this not say (present) that he clever (present)

Apart from the unidirectional relationship already indicated, the thing to be noted is that the not that p makes a weaker claim than the that not p form i.e. the strength of assertion is not so strong in not that p as it is in that not p.

Then there is, of course, the last category of verbs¹² which co-occur with negatives i.e. under the specified conditions and in these cases the not that p has a reading which is synonymous with the that not p version – the neg-raisers.

But what are we to do with this discovery? It is obvious that the difference is not accounted for by the conventional FACTIVE/NON FACTIVE distinction. Some putative factives belong to the first category but some are somewhat different inasmuch as they are not subject to the specified negation constraint:

(130) I regret that he won't come.

(131) I don't regret that he will come.

The non-factives are evenly distributed between the unidirectional and bi-directional categories. Want and desire both belong to the non-factive category, but want belongs to the bi-directional and desire to the unidirectional category.

Let us have a look at the verb seem – which allows neg-raising and shares the syntactic properties of the other neg-raisers and yet does not have the explicit meaning "be of the opinion". (See Appendix II for an analysis of seem).

Austin (1962b:42ff) points out that seem is different from looks in the respect that when a statement is prefaced by "It seems" – the speaker wishes to indicate that he is expressing a judgement and not stating what he considers to be a fact. That is to say that the speaker has some evidence for that p

but the evidence to his own reckoning is not conclusive. Sibley (1971:82) indicates something similar when he says that the "opinion indicator" is at a larger premium in seems. Price (1941:282) in his review of Ayer's "Foundations of Empirical Knowledge" arrives at a similar conclusion when he says "seeming has reference to judgements and assertions usually of a spontaneous and unconsidered kind...".

Roderick M. Chisholm (1966:16) points out that "I know" performs the function of giving an assurance, "I believe" may perform that of taking it away. "I believe" under certain circumstances is tantamount to saying "Don't take my word for it, I won't be responsible".

Prefacing a statement with "In my opinion" is to considerably weaken the assertive strength of the utterance. When one is not absolutely sure or is not totally convinced and wishes to leave oneself enough room to get off the hook if the going gets bad, he says:

(132) In my opinion Mary is crazy.

or (133) which is a paraphrase of (132)

(133) I think that she is crazy.

But when there is sufficient strength of conviction and no desire to "hedge" the statement need not be prefaced by what Prince (1976) calls a "metastatement hedge", one usually says:

(134) Mary is crazy.

or prefaces it with a strong assertive verb like know

(135) I know that Mary is crazy.

It should be clear from the insights provided by the philosophers that if we consider use and the attitude of the speaker, then, know, maintain and seem can be placed on a scale of somekind. When a speaker is absolutely confident and can afford to give a guarantee, he uses a strong assertive, know. If he is less sure and can only make a claim — he uses a less strong assertive like maintain. When, however, he does not wish to commit himself at all i.e. he wishes to hedge, he uses one of the neg-raisers.

Bolinger and Poutsma had noticed that the not that p forms make a weaker claim than the that not p forms. It is only natural therefore that when a person wishes to guarantee, there is no provision for the not that p forms simply because the strength is an essential component of the utterance and it cannot admit of any kind of weakening. There is, therefore, no kinship between the two forms. The intermediate, less strong assertives allow this kind of weakening without any problem. Something very interesting happens with the third category i.e. the neg-raisers. They are, as it is, not strong assertives to begin with; and when there is further weakening by neg-transportation, the difference between the transported weak and the non-transported not strong becomes blurred; and they appear synonymous in one reading. We could schematically put it in this fashion:

think			
believe	that not p	-	not strong
guess			
.....	not that p	-	weak
.....			

in one reading not strong appears synonymous with the weak if one is not specifically looking for the difference. Whereas with the intermediate category of verbs:

say			
maintain	that not p	-	strong
.....			
.....	not that p	-	weak

the difference is easily perceptible.

The biggest gain of the pragmatic analysis, therefore, is that not only does it identify the area in which neg-raising operates, but it also provides a rationale as to why the neg-raisers behave in the way that they do. That is, it does not rest content with assuming that there is a relationship of synonymy between the that not p and not that p uses of these verbs, but it also tells us WHY it must be so.

This hypothesis could claim greater power if it could satisfactorily sort out the want, desire tangle. The pragmatic hypothesis predicts that the neg-raisers are weak assertives and that neg-raising is a function of this weakness. If, therefore, the distinction between want and desire could be shown to exist on this weak-strong parameter, our hypothesis would stand vindicated. A careful look at the dictionary (WEBSTERS THIRD INTERNATIONAL) shows that we are not far off the mark:

DESIRE: in a more general sense, however, emphasizes the strength or ardour of feeling and often implies strong intention or aim.

WISH: is less strong often suggesting a not usually intense longing.

WANT: a less formal term than wish and so is often interchangeable with it.

It is clear, therefore, that the neg-raiser want is weaker than the non neg-raiser desire. If we could now somehow connect want with the concept of assertions or opinions, our task would be complete. Horn (1975) suggests that 'opinion' may cover both epistemic cases and deontic cases; that is, there may be an opinion of the heart (want) as much as there is an opinion of the mind (think, believe, expect, guess, suppose, seem etc.). Horn's analysis, coupled with our own seems to explain the phenomenon of neg-raise much more satisfactorily than the syntactic and the semantic analyses.

Loose ends: There is, however, still a loose end left. If want can allow neg-raising why not wish? The only possible reason that can be suggested at present is that wish apart from being "weaker" than desire, has a subjunctive element which prevents neg-raising.

(136) I wish₁ he would come.

The embedded clause, even though it is in the declarative form, somehow implies he won't come. The dictionary reading for wish is to yearn for something unattainable (WEBSTERS THIRD INTERNATIONAL) or have a desire for something unlikely to be attained or achieved (ALD). Lauri Karttunen (1971) called verbs of this kind, which have a negative element built into them, negative implicative verbs.

(137) I doubt that he will come.

(138) I deny that he has come.

Since wish has a negative element built into its semantic structure, further incorporation of another negative leads to complications which renders it unfit for the neg-raising paradigm.

Additional remarks. The credibility of a hypothesis is often enhanced not only by the accounting it proposes for the data it sets out to explore, but the explanation it offers in areas which are not explicitly included in the data. We find that the pragmatic hypothesis, not only enumerates some of the syntactic characteristics of the neg-raisers, but it can also suggest reasonable explanations for the peculiar syntactic restrictions.

1. Modals: Bruce Fraser (1975) has pointed out that the modal must co-occurs only with strong assertives. And the modal can often serves to weaken the assertive strength of utterances without causing any change in the cognitive meaning of utterances. Thus between (139-140)

(139) I assure you that Mary is crazy.

(140) I can assure you that Mary is crazy.

the difference is only in the strength of the assertion. Think and believe, in the neg-raising sense, never occur with either must or can without significant change in import. Know appears with must but not with can:

(141) I must know what has happened to Mary.

(142) aamaar jaante hobe merir ki hoechhe

My know of must Mary of what happen (present perfect)

(143) *I can know what has happened to Mary

(144) *aami jaante paari merir ki hoechhe

I know can

(145) I must admit that Mary is crazy.

(146) aamae shikaar korte hobe (je) meri paagol

to me admit must that

(147) I can admit that Mary is crazy.

(148) aami shikaar korte paari (je) meri paagol

I admit do can that Mary crazy

(149) *I must think (that) Mary is crazy.

(150) *aamae mone korte hobe meri paagol

(151) *I can think that Mary is crazy.

(152) *aami mone korte paari meri paagol

I think do can

What does all this show? Simply, that the assertive strength of the hedges is very low and they cannot, therefore, withstand

further dissipation and thus the use of can (in the intended sense) is ruled out. And must, because it occurs with strong assertives only, requires a minimum strength from the matrix verb, which unfortunately the hedges do not have, co-occurrence with must is, therefore, also ruled out. Know predictably co-occurs with must, but cannot co-occur with can because, as we have already suggested, the assertive strength is the very essence of the 'know verbs'.

2. WH complements: We should briefly like to indicate a possible reason for the aversion of the hedges for WH complements. What is a basic element of all the other WH words. Thus how can be interpreted as what manner, when as what time, where as what place etc. This is borne out by the fact that verbs which do not take what complements cannot take any other kind of WH complement. However, those verbs which do take what complements do not necessarily take other WH complements.

(153) I believe what he says.

(154) *I believe why
 where he says.
 how
 when

The hedges, as we have already seen, imply "judgement of an unconsidered kind". That is, the analysis preceeding the judgement is perfunctory. Judging the "reason", the "manner", the "time", the "place" probably requires something more than a perfunctory analysis. The non-be of the opinion that S

sense of think for instance means "cerebration", debating, considering etc. there is therefore no bar to the verb in this sense occurring with WH complements¹³:

- (155) I am trying to think what must have happened
 guess how it could happen
 where it could happen

The use of the continuous and the matrix verb try rules out the possibility that think and guess here have been used in the "be of the opinion that S" sense. One cannot try to be of the opinion about something, one simply has an opinion one way or the other.

3. Answer to questions: Similarly, the reason why the weak assertives can constitute meaningful answers to yes/no questions is that (as Lindholm (1969) points out) the neg-raisers imply an opinion, the non neg-raising sense often implies a claim. When one is asked a question, one is expected to give one's opinion rather than put forward a claim:

- (156) Is neg-raising a feature of pragmatics?

In my opinion it is so.

I am of the opinion that it is so.

 think
 I guess so.
 believe

*I claim so.

In special circumstances, (156) could provoke one into rebutting the insinuation implicit in the question. We should, for instance, react to (156) with

(157) We are convinced that it is.

But (157) is a rebuttal and not an answer to (156).

4. Sentence pronominalization: Cushing (1972) suggests that sentence pronominalization is related to what he calls a feature F:

sentences coreferential with IT (+F)

sentences coreferential with SO (-F)

and further, the feature F is associated with (+ stance).

That is (+F) \rightarrow (+ stance) and (-F) \rightarrow (- stance) and

moreover, he says "replacing SO with NOT is equivalent with interchanging true and false". Lindholm (1969) and Bolinger (1970) both suggest similar semantic distinctions between

believe it and believe so but neither considers the behaviour of IT and SO with other verbs. This aspect needs further investigation, but prima facie the Cushing-Bolinger-Lindholm analysis seems to be superior to the tentative suggestion of the Kiparskys that in factives, which have the noun fact as the object of the matrix verb, fact is pronominalized by IT - whereas in the nonfatives, the entire complement sentence is pronominalized by SO. Schematically put:

$$\text{NP} \rightarrow \begin{array}{c} \text{Fact} + \text{S} \\ \text{S} \end{array}$$

IT pronominalizes the FACT

SO pronominalizes the S

Stockwell, Schachter and Partee (1968) have shown that not all factives have the noun fact in the deep structure. Moreover, as Cushing shows, suggest is (- Factive) and should, therefore, take SO but it takes IT

(158) Tell Bill that he should work overtime tonight.

(159) I'll suggest ^{it}_{*so} to him, but I'll bet he gets mad
and threatens to organize a wild cat.

Cushing's analysis lends further support to our contention that neg-raisers are weak assertives i.e. it is only when one is unwilling to take a stand that he weakly asserts something.

Theoretical Implications: As must be obvious from the foregoing discussion, the pragmatic hypothesis is an extension of the semantic hypothesis. It seeks to incorporate the attitude of the speaker in the analysis of utterances. It is clear that the standard and the extended standard models have no provision for the incorporation of features of this kind; simply because these models will not admit that anything but syntax can be endowed with a generative capacity and secondly, that relationships of synonymy and antonymy are semantic relationships and must be enumerable at the semantic level.

The pragmatic hypothesis supports the Generative Semantics model. The attitude of the speaker can be incorporated at the level where the semantic structure of a sentence is specified. A node, perhaps, can indicate the attitude of the speaker: for instance, the semantic deep structure will

tell us whether the attitude of the speaker is one of confidence or diffidence (and things of this sort) and accordingly indicate whether the lexical transformation should introduce know or think, and which concurrently will tell us whether the "pair-mates" are synonymus or not.

CHAPTER III

FACTIVES

Kiparsky and Kiparsky (1971) and Fillmore (1968) were in many ways the first signs of growing uneasiness in the established paradigm. Fillmore's case grammar very convincingly argued that unless certain features were allowed to play a generative role, semantic interpretation was neither natural nor complete. In spite of the validity of the keen insights provided by Fillmore, his model had one basic flaw: he did not realize (or atleast did not overtly indicate) that the case relationships that he sought to incorporate in the deep structure were unmistakably semantic in nature and could not be incorporated in the syntactic deep structure of the standard model. That is, enough evidence had not accumulated till then to warrant a break in the established paradigm and the construction of a new one.¹

The Kiparskys convincingly showed that apart from the fact that some verbs tend to presuppose the truth of the complement sentences (whereas the other verbs don't), this notion of "factivity" seemed to have definite and definable syntactic consequences. They were able to show that the notion of "factivity" could not be dismissed as an interesting but linguistically irrelevant phenomenon because it was able to

capture generalizations that were missing in Rosenbaum's work on complementation. Rosenbaum (1967) had described the different complement types and merely listed the verbs which allowed one kind of complementation or the other. The notion of factivity could be utilized to sort these verbs into patterned groups. For instance, we find that only non-factives allow Rosenbaum's For ... to complementation or Postal's (1974)

Object Raising:

- (1) I think him to be honest.
- (2) I believe him to be honest.
- (3) I expect him to be honest.
- (4) I suppose him to be honest.
- (5) I know him to be honest.²
- (6) *I realize him to be honest.
- (7) *I regret him to be honest.
- (8) *I resent him to be honest.

Once again we find that only the non-factives allow Subject Raising or Tough Movement (Postal, 1971)

- (9) It is thought that he is honest.
- (10) He is thought to be honest.
- (11) It is believed that he is honest.
- (12) He is believed to be honest.
- (13) It is expected that he is honest.
- (14) He is expected to be honest.

- (15) It is supposed that he is honest.
- (16) He is supposed to be honest.
- (17) It is known that he is honest.
- (18) He is known to be honest.
- (19) It is realized that he is honest.
- (20) *He is realized to be honest.
- (21) It is regretted that he is honest.
- (22) *He is regretted to be honest.
- (23) It is resented that he is honest.
- (24) *He is resented to be honest.

Rosenbaum's Poss ... ing complementizers seem to be restricted to factive verbs

- (25) His being found guilty.
- (26) John's realizing his mistake.
- (27) John's regretting his mistake.
- (28) John's resenting Jane's attitude.
- (29) *John's expecting his mistake.
- (30) *John's supposing his mistake.
- (31) *John's thinking his mistake.
- (32) *John's believing his mistake.

That infinitive constructions are associated with non-factives and gerundive nominals with factives is borne out by (33-36). In (33) and (34) the truth of the complement is not presupposed:

(33) They reported the enemy to have suffered a decisive defeat.

(34) I remembered him to be bald (so I was surprised to see him with long hair).

whereas in (35) and (36) the truth of the complement sentence is presupposed:

(35) They reported the enemy's having suffered a decisive defeat.

(36) I remembered his being bald (so I brought along a wig and disguised him).

The biggest virtue of the formulation of the Kiparskys' was that it exhibited a healthy concern for semantic functions of the different complement types which was implicit in Lees (1960) but totally ignored in Rosenbaum (1967). It was for this reason, perhaps, that Rosenbaum failed to see that infinitival complements took or rejected the additional preposition for in a rule-governed and predictable way. He was, thus, forced to posit a for for all infinitival complements (even though the sentence sounded pretty odd in very many cases and it had obligatorily to be deleted in the surface structure). The generalization that was clearly being missed was that the for appeared regularly with emotives:

(37) It bothers me for John to have hallucinations.

(38) I regret for you to be in this fix.

but not with cognitives:

(39) *I believe for John to have liked Anslem.

(40) *I forced for John to say 'cheese'.

(41) I believe John to have liked Anslem.

(42) I forced John to say 'cheese'.

Though very brief and somewhat sketchy, the work of the Kiparskys' seemed to provide the generative linguist with an insight of a kind he had not encountered very often in the decade or so he was busy speculating about, and consolidating the claims of his brand of linguistics. The work of the Kiparskys' showed a refreshing concern for semantics. It sought to rescue semantics from the thralldom of syntax and restore to it some of the glory it had enjoyed in the works of Otto Jespersen.

In spite of espousing the cause of semantics - the Kiparskys were left with no option but to try desperately to incorporate this feature into the framework of Generative Syntax as this was the only model available at that time. They proposed phrase structure rules of the following kind:

$$\text{NP} \longrightarrow \begin{array}{c} \text{Fact} + \text{S} \\ \text{S} \end{array} \quad \dots \dots (i)$$

which would indicate whether a particular sentence was to have a factive reading or not. Apart from the far-reaching theoretical consequences of phrase structure rules of this kind (we will consider them in a moment) the greatest difficulty with this rule is that it is even observationally inadequate. The Kiparskys themselves realized that verbs like know and realize cannot co-occur with the noun fact in the object position.

(43) *I know the fact that John is here.

(44) *I realize the fact that John is here.

Stockwell, Schachter and Partee (1968) provide more instances where phrase structure rule (1) runs into difficulties. To save the rule, therefore, we would have to say that for verbs like know and realize the noun fact must be obligatorily deleted whereas for other factive predicates the deletion rule is optional. And apart from the fact that we would thus have arrived at a similar situation as Rosenbaum's for ... to complementizers, we would have to resort to lexical markings to indicate whether the Fact Deletion Rule applied optionally or obligatorily with regard to a particular verb, thus, considerably undermining the very effort to seek generalizations.

The theoretical consequences of a phrase structure rule like (1) have, however, not received the requisite attention in the literature. For, this rule, albeit inadvertently, anticipates and foreshadows a major development in the history of Transformational Generative Grammar. What is one to make of the item fact in the phrase structure rule (1)? Is it a lexical item? If it is, it clearly violates the principle of unitary lexical insertion i.e. all lexical items must be inserted at the same stage, enbloc; for it is certain that the category S to the right of fact needs to be further expanded before other lexical items can be inserted. To put it briefly, the rule clearly concedes that lexical insertions

can take place at various stages of derivation. If fact is not a lexical item is it a semantic primitive? If it is, it is ~~a~~ already conceded that the base generates semantic primitives as well as categories, the nebula of Generative Semantics has already become visible. Is fact a category? If it is, it seems absolutely out of place in the company of substantive universals like S, NP, VP, V, N, Adj, Adv etc. The noun fact certainly cannot be seen to occur in the deep structure of sentences in other languages which have a factive reading:

(45) aamī jaanī she aashbenaa - (Factive)

I know (present) he come (future) not

I know he won't come.

(46) aamaar mone hoe o aashbenaa - (Non-factive)

My mind in happens he come (future) not

I think he won't come.

(47) māī jaantaa hūū voh nahī aayegaa - (Factive)

I know (present) he not come (future)

I know he won't come.

(48) mujhe lagtaa hai voh nahī aayegaa - (Non-factive)

To me appear (present) he not come (future)

It appears to me that he won't come.

The syntactic evidence that the Kiparskys sought to adduce in support of their phrase structure rule was that the sentence pronominalizer IT pronominalized the noun fact

of a factive sentence, whereas SO pronominalized the entire complement of a non-factive verb. We have already seen (in the additional notes to Chapter II) that the verb suggest, though non-factive, takes IT rather than SO when it needs to pronominalize a proposition.

(49) Tell Bill that he should work overtime tonight.

(50) I'll suggest ^{it}_{*so} to him, but I will bet he gets mad and threatens to organize a wildcat.

Suggest is not the only verb which is non-factive and yet takes IT rather than SO when it seeks to pronominalize the complement sentence. Think, believe, expect are all nonfactives and they do, in particular readings, take IT rather than SO:

(51) Harry thinks that Oswald killed Kennedy and
John thinks ^{so}_{*it} too.

(52) Henry thinks double-think and I think ^{*so}_{it} too.

(53) Was Caesar a Jew? I believe ^{so}_{*it} .

(54) The evidence that neg-raising is cyclic is so convincing
that I now believe ^{it}_{*so} .

A suggestion implicit in "FACT" was that the factive or non-factive interpretation that a sentence received was not entirely contingent on the nature of the matrix verb. Their sentences (our 33-36) with report and remember - clearly show that interaction with the complement type may have salient consequences. Developing on this suggestion Karttunen (1971)

was able to show that allegedly factive verbs seem to shed their factivity in conditional sentences:

- (55) If I regret later that I have not told the truth;
I will confess it to everyone.
- (56) If I realize later that I have not told the truth;
I will confess it to everyone.
- (57) If I discover later that I have not told the truth;
I will confess it to everyone.

(55) yields a presuppositional reading but not (56) or (57).

Karttunen further demonstrates that in the environment Q + THAT clause:

- (58) Did you regret that you hadn't told the truth?
- (59) Did you realize that you hadn't told the truth?
- (60) Did you discover that you hadn't told the truth?

(58) and possibly (59) have presuppositional readings but (60) is quite open in this respect. Karttunen tried to solve the problem by indicating that there are degrees of factivity i.e. Realize is more factive than Discover and yet less factive than Regret. Karttunen's suggestion is, however, more hinted at than defined clearly. Moreover if the indication is that there is a taxonomic hierarchy of some kind: that a verb of n degree of factivity appears so in more environments than a verb of n-1 degree of factivity and in fewer environments than n+1 degree of factivity, then, the hope is clearly belied, because there is no evidence for the existence of such a hierarchy.

Insightful though the work of Karttunen is, it is incomplete. He has taken only one complement type - the THAT clause, and neither "action nominals" or "predicate nominals"; nor has he considered what happens if the verb has an inchoative reading. Rosenberg (1975) persuasively shows that all these considerations are relevant and important for any discussion of factiveness of verbs. We have not reproduced these arguments, pertinent as they are, because the revision we suggest is much more drastic and tends to rob these arguments of much of their utility. Moreover, Karttunen's work is no more than a listing, under heads like factives, semi-factives, implicatives etc. No real attempt has been made to arrive at generalizations or to ponder over the "how" and "why" beyond merely the "what". The only useful suggestion in Karttunen's work is that the feature "emotive" renders verbs marked positively for it, factive in all syntactic environments whether it be a sentential complement, WH + THAT clause, or a conditional. Beyond this classification not much more is attempted.

Semantic Analysis: It could not have been entirely unexpected that a purely syntactic analysis of factives, in the fashion of the Kiparskys, was destined to fail because it sought to provide syntactic explanations for a phenomenon which was not at all syntactic. The real significance of his work, as we have already indicated, lay in the suggestion that semantics could not be relegated to a purely interpretative level.

Hooper (1975) attempts a classification which is more semantic than syntactic. She classifies predicates which take sentential complements along two dimensions, assertives vs. non-assertives, and factives vs. non-factives. The assertives are further classified into weak and strong assertives. There is also cross-classification involved as there are assertives which are semi-factives. Her weak assertives are the neg-raisers: think, believe, expect, want etc. It will be remembered that we called these verbs weak in assertive strength in the last chapter. Her strong assertives are more or less the overt performatives, or the ones which we called say verbs. The assertive semi-factives are the ones we called the know verbs. Hooper, however, does not indicate whether the assertive semi-factives are weak or strong in assertive strength. We propose to take this up later. Finally we have the non-assertive true factives which the Kiparskys called emotives.³ The other categories do not concern us here. We should like to concentrate on two things here - the true factives i.e. factives which retain their factive reading even in conditionals are emotives semantically, with distinct syntactic features; and secondly the semi-factives are assertives.

True Factives: We have already seen that the verbs that the Kiparskys called emotives appear with for in infinitival complements (sentences 37, 38) but semi-factives (and cognitives in general - sentences (39-42) - of which semi-factives are a

subset) do not; or atleast they must be obligatorily deleted. We also find that Hooper's true-factives are really emotives, even though Hooper does not recognize them as such; and these verbs retain their factive reading in all environments.

(61) Are you disappointed
 bothered that Morarjee wants to enforce
 amused
 hurt
 worried

prohibition?

(62) Do you regret that prohibition is not being
 resent
immediately enforced?

(63) If people are disappointed
 amused when prohibition
 worried
 hurt

succeeds, they will demonstrate in the streets.

But the cognitives shed their factivity in these environments:

(62) Did you discover
 find out that Morarjee wants to enforce
 learn

prohibition?

(65) If people realize
 see that Morarjee genuinely
 observe
 notice

wants to enforce prohibition they'll support him.

The situation is similar in Bengali:

(66) tumi ki dukhhito je Morarji nesaakoraa
 sad
 you what chintito that Morarjee addiction do
 worried
 bondho korte chaaye
 stop do want

(66) yields a factive reading as well as (67)

(67) loke jodi dukhhito hoe jokhon nesaakoraa
 sad happen
 people if chintito hoe when addiction do
 worried happen
 bondho hobe taaraa raastaae prodorshon korbe
 stop happen (future) they street in demonstrate do (future)

but the cognitives shed their factivity in (68) and (69)

(68) tumi ki jaante paarle je Morarjee nesaakoraa
 learn able to
 you what aabishkaar korle that Morarjee addiction do
 discover do
 bondho korte chaaye
 stop do want

(69) loke jodi bujhte paare je Morarjee shotti
 realize able to
 people if lokkho kore that Morarjee really.
 see do
 nesaa koraa bondho korte chaaye taara take shomorthon
 drink do stop do wish they he support
 korbe
 do (future)

so it is clear that the difference between the cognitives and the emotives with respect to their factivity in different syntactic environments is not a freak of English. Moreover the emotives, as is to be expected, can easily appear when they are seen as reactions to some phenomenon:

(70) If prohibition succeeds I won't be disappointed
hurt
worried
amused

but a construction like this with cognitives seems odd if not outright ungrammatical -

(71) *If prohibition succeeds I won't be known
discovered
realized
seen

In Bengali the distinction is even more sharp: the emotives have a distinct lexical realization – when they are used in the experiencer case. To draw a very rough parallel with English:

(72) I hope

can be rewritten in some situations as (73)

(73)' I am hopeful

similarly, in Bengali, conjunct verbs formed by the addition of verbal operators to emotive nouns can be rewritten in the experiencer case as follows:

aanondo - aanondito

happiness to be in a state of happiness

dukkho	-	dukkhito
sadness	-	to be in a state of sadness
onutaap	-	onutopto
repentance	-	to be in a state of repentance
uttejonaa	-	uttejito
excitement	-	to be in a state of excitement
pulok	-	pulokito
thrill	-	to be in a state of thrill

All these conjunct verbs, therefore, appear predictably in environments like (70)

(74)	jodi indiraa dondito hoeaam	If Indira punished is I	aanondito	
			dukkhito	
			onutopto	hobe
			uttejito	
			pulokito	will be

The cognitives on the other hand are mostly verbs to begin with and do not require verbal operators to convert them into conjunct verbs:

jaanaa	-	jaani
know	-	I know
boghhaa	-	bujhi
understand	-	I understand
dækhāa	-	dekhi
see	-	I see

and these verbs have no to forms

*janito

*bujhito

*dekhito

and even those cognitives which are conjunct verbs

aabhishkaar	-	aabhiskrito
-------------	---	-------------

discover	-	has been discovered
----------	---	---------------------

gyaan	-	gāato
-------	---	-------

knowledge	-	to be known
-----------	---	-------------

do not function in the same way as the emotives. This is to say that to forms with emotives have an experiencer reading – the meaning is close to "be in a state of" – whereas the cognitives, when they rarely take the to suffix, have a passive reading. A semantic analysis of (75) and (76) will make this clear.

(75) aamī aanondito

I am in a state of happiness.

(76) aamī aabishkrito

I am discovered.

Predictably, therefore, aabhishkaar even when it occurs with the to suffix is ruled out in an environment like (74)

(77) *jodī indīraa dondīto hoe aamī aabhiskrito hobo

If Indira punished happen I discovered do (future)

It is clear from the foregoing analysis that there is sufficient syntactic evidence and motivation for keeping the

cognitive semi-factives apart from emotive true factives. That is to say that the semantic classification that Hooper attempts for these verbs is not unjustified. Before we attempt to show the deficiencies in Hooper's classification, we want to make another extremely important point with the examples that Hooper provides: namely that the cognitive semi-factives are assertives.

Assertives: Hooper seeks to justify her claim that verbs like think, believe etc. (weak assertives), claim, maintain, say etc. (our say verbs) as well as the semi-factives know, realize, discover etc. (our know verbs) are assertives on the ground that these verbs incorporate two assertions, one of the matrix verb and the other of the embedded verb. Thus in sentences like (78), (79) and (80) two claims to truth are being made rather than one:

(78) Do you think the game has ended?

(78) could be a query whether you think X, or a genuine enquiry about the state of the game i.e. whether the game has ended.

Similarly (79) has two different readings:

(79) I say that he is dead.

It is true that I say X

and

He is dead.

(80) I realize that he is wicked.

I realize X

He is wicked.

If there are two assertions then it should be possible to emphasize one at the cost of the other; and this is what happens with the assertives. They have a parenthetical as well as a non-parenthetical reading, (Urmson, 1956) that is, the complement can be preposed:

- (81) There are two kinds of factive predicates, I found out.
- (82) I found out that there are two kinds of factive predicates.
- (83) This war will never end, we maintained.
- (84) We maintained that the war will never end.
- (85) I think the wizard will deny your request.
- (86) The wizard will deny your request, I think.

but complement preposing is not possible with true factive-emotives:

- (87) I forgot that she was a compulsive liar.
- (88) *She was a compulsive liar, I forgot.
- (89) I regret that it is difficult to make ends meet.
- (90) *It is difficult to make ends meet, I regret.
- (91) I am sorry that Herman has not finished his work.
- (92) *Herman has not finished his work, I am sorry.

Moreover a yes/no question is often ambiguous in import and can be answered in two different ways:

- (93) Do you think he is dead?

could be a query about whether the addressee is of the opinion that he is dead; or it may be a query about the condition of the person spoken about, and naturally, therefore, can be answered by either

(94) Yes, I do.

or

(95) Yes, he is.

Similarly (97) and (98) are ambiguous in the same way

(96) Do you maintain that he is dead?

(97) Do you realize that he is dead?

and they can be answered:

(98) Yes, I do.

(99) Yes, he is.

This is however not possible either with non-assertive true factives or non-assertive non-factives

(100) Do you regret that Indira has been released?

is only a question about the addressee's mental state and not about the complement and thus can be unambiguously interpreted as

(101) Yes, I do.

even when the answer is only a brief

(102) Yes.

it can never be interpreted as

(103) Yes, she is.

Similarly (104) questions the matrix verb and not the complement clause:

(104) Is it likely that she was arrested without proper preparation?

(105) Yes.

can only be interpreted as

(106) Yes, it is likely.

Hooper further suggests that tag questions, under certain conditions, can be formed from the complement sentences from weak assertives and semi-factives:

(107) I see you have a new car, haven't you?

(108) I notice that she has had a face lift, hasn't she?

(109) *I am sorry it stopped raining, didn't it?

(110) *It is odd he forfeited the match, didn't he?

Hooper also suggests that assertions do not permit clause reduction, and since semi-factives do not permit clause reduction:

	realized	
(111) *Everyone	saw	John's being drunk.
	discovered	

	ignored	
(112) Everyone	resented	John's being drunk.
	deplored	

this is construed as a further proof that the complement clause in semi-factives is asserted. Some other proofs are also adduced in Hooper and Thompson (1973) in support of the contention that the complement clause in sentences with semi-factive matrix verbs are indeed asserted. Hooper and Thompson (1973) point out that assertives (therefore semi-factives) tolerate root transformation in their complements, whereas the true factives do not:

- (113) Sally plans for Garry to marry her, and he recognizes that marry her he will.
- (114) *Sally plans for Garry to marry her, and he resents the fact that marry her he will.
- (115) I discovered that standing among the spectators was the former champion himself.
- (116) *It is surprising that standing among the spectators was the former champion himself.

Gains: The major gain of a semantic analysis of the kind Hooper attempts is that it effectively dispels, with an impressive array of syntactic evidence, a belief that has persisted in the literature ever since Kiparsky and Kiparsky (1971) - namely, that the complement clause of factive matrix verbs is not asserted but presupposed. The Kiparskys found that the verb assert was both syntactically and semantically non-factive

(117) *I assert the fact that I don't intend to participate. and, therefore, they suspected that factive verbs do not assert, but presuppose, the truth of the complement clause. The trouble with an argument of this kind is that it overlooks the possibility that the verb assert may not have an assertive function. That assumptions of the kind implicit in the argument of the Kiparskys can lead to erroneous conclusions becomes evident when we consider examples from other areas.

The verb perform, for instance, is not, curiously, a performative verb. A sentence like (118) is ungrammatical:

(118) *I hereby perform this task.

for here, the verb certainly describes rather than performs an action. Kiparsky and Kiparsky themselves realized that there may be a gulf between appearance and reality when they rightly pointed out that fact itself is not a factive predicate:

(119) It is a fact that he is dead.

In this sentence it is not presupposed that the complement proposition is true. It would not even be worth trying to ascertain syntactically whether assert is an assertive because the work of Hooper clearly indicates that not all assertives are factives but only a special subset of them.

Lacuna: Even though Hooper's analysis makes a crucial breakthrough in the study of factives it does not address itself to, and therefore leaves unanswered, a number of crucial questions. These can be listed in the following way:

1) What is the common element between the semi-factives and the true factives which ensures a factive reading of the complement that clause?

2) What makes for the crucial difference between true factives and semi-factives which permits only the true factives to have a factive reading in conditional sentences?

3) Among semi-factives, what causes some verbs to have a factive reading in the environment WH + THAT clause but not the others?

Moreover, Hooper's work in the last resort amounts to a sophisticated listing of predicates based on, and supported by, strong syntactic evidence; it does not venture to study the processes which make certain verbs factives to the exclusion of the others. There is also a failure to recognise the distinction between pragmatic and other semantic features. Fillmore (1971) has never hesitated to include pragmatic properties in his lexicon - but he has clearly seen the difference between the kinds of information he wishes to incorporate in the lexicon.

Pragmatic Analysis: An overt recognition of the fact that pragmatic concepts play a useful and perhaps an essential role in grammatical descriptions can pave the way for extending explorations in different directions and attempting different kinds of explanations for the phenomenon concerned rather than trying to persevere with this kind of analysis in vain. For the limited purpose of Hooper's paper it was not necessary to classify the true factives as emotives. We have, of course, presented evidence in support of this kind of classification, but the failure to recognize that the category assertive is a pragmatic category precluded the possibility of seeking pragmatic explanations. If pragmatic categories are admissible,

(and what is more, thought to be essential) then there cannot be a legitimate bar against providing pragmatic explanations to phenomenon which do not seem to have any explanation otherwise.

If we accept that the true-factives are emotives and also that pragmatic explanations are in order, then the factivity of true factives can be explained with ease. Rosenberg (1975) enunciates a pragmatic principle of emotional reaction: "People react emotionally to states and events that exist rather than to non-existent, fictitious or hypothetical ones" - which accounts for the fact that emotives retain their factivity even in conditional sentences and questions.

But what about the semi-factives - our know verbs? Why do they behave like emotives when the complement is a THAT clause, but differently in the environments Q + THAT clause or conditionals? It is quite obvious that Rosenberg's pragmatic principle is only applicable to emotives and does not restrain the cognitives in the same way. That is, it is quite true that we do not react emotionally to hypothetical or non-existent situations - we can, and very often do, intellectually react to hypothetical and non-existent states and events: we anticipate, we deliberate over, we imagine states or events which are not in existence at the moment of the particular intellectual activity. This is to say, that different classes of verbs have different kinds of syntactic

and semantic constraints. Even though the cognitives are not constrained by Rosenberg's pragmatic principle, they do have constraints of their own: we saw in the last chapter that the cognitives cannot be negated when the speaker is the subject and the verb is in the present tense but the emotives are not subject to this constraint. That is, it is anomalous to say that what one is speaking about is not in the cognition of the speaker — but it is quite possible not to have a particular emotional reaction or not have any emotional reaction whatsoever about a particular event.

We have, therefore, found the difference which accounts for the difference of behaviour of the emotives and the cognitives with respect to conditionals and interrogatives. We must now account for the difference between the different kinds of assertives so as to be able to explain why the know verbs have a factive reading when the complement is a that clause, whereas Hooper's strong and weak assertives do not yield a factive reading in this environment.

As in the case of Neg-raising we should like to examine the other verbs first and then try to see the semi-factives as a residual category. The strong assertives as Hooper points out "all describe a verbal act"; in other words they are performatives, some of them overt.

(120) I hereby certify

and the rest of them covert: charge, grant, hint, maintain etc. Bruce Fraser (1975) has pointed out that not all performatives co-occur with hereby and it cannot thus be treated as a diagnostic environment for performatives. Only performatives which presuppose social institutions, like the Church or law courts, co-occur with hereby

(121) I hereby baptise thee

(122) I hereby condemn you to ten years' rigorous imprisonment.

but those performatives which only presuppose the institution of language - Fraser calls them vernacular performatives - do not occur with hereby. If Hooper's strong assertives are performatives - then it is small wonder that they are not factives. Austin (1962a) pointed out that performatives are non-truth functional; that is, it makes no sense to talk of the truth or falsity of performative utterances but only of appropriateness and "happiness conditions". Thus it is quite possible to have sentences like:

(123) Even though there isn't a shred of evidence to support his claim, he doggedly maintains that the "emergency" was a blessing.

In passing we must take note of the fact that the theory of speech acts has undergone considerable change through the years. Austin's classical formulation required that a performative utterance have a first person subject and the verb in the present indicative mood. Through the years it has come to

be recognized that these constraints are peculiar to what Bruce Fraser called "institutionalized performatives". Even Austin recognized that there was a difference between "explicit" and "implicit" performatives. It is because of this extension that Hooper calls "strong assertives" items that "describe a verbal act". Moreover, Hooper points out that the constraint concerning the first person can be waived and the assertion can be an indirect one - "an assertion attributed to another speaker" (page 96).

Returning to (123) - the centre of interest is not whether the proposition the emergency was a blessing is true or false, but given the antecedent clause whether it was appropriate for him to maintain what he did. And in the opinion of the speaker it was not natural, it was dogged. The adverb dogged can be substituted by stupid, or obdurate

(124) Even though there isn't a shred of evidence to support
 his claim he stupidly maintains that the "emergency"
 obdurately
 was a blessing.

And herein lies the difference between the know verbs and the say verbs. Whereas (123) and (124) are grammatically impeccable, (125) is not:

(125) *Even though there isn't a shred of evidence to support
 his belief, he doggedly knows
 obdurately notices that the
 stupidly. realizes
 "emergency" was a blessing.

This is to say that to know is to assert from a position of absolute strength. It is not surprising, therefore, that it will not admit of weakening; we saw in the last chapter that the assertive strength of the say verbs can be reduced by the use of the modal can - but the know verbs do not admit of this kind of weakening, because the strength is the very essence of these assertives - that is, given the nature of the evidence, one is not left with any option as it were, one can have only one attitude. One may neither weaken the assertion by the use of the modal can nor strengthen it by the use of adverbs:

(127) I vehemently maintain that the "emergency" was an aberration.

(128) *I vehemently ^{know} realize that the "emergency" was an aberration.

But what about sentences like (129) and (130)?

(129) He knows that the "emergency" was an aberration.

(130) He doesn't know that the "emergency" was an aberration.

In (129) the assertion is indirect, the speaker ascribes the assertion to the subject of the sentence. In (130) the speaker is assumed to have all the evidence to believe that the complement proposition is true, and the speaker also asserts that the subject of the sentence does not have the evidence to believe that the complement clause is true.

This hypothesis tries to forge an interesting link between the notions evidence and evident, it suggests that

something is evident to a person when and only when he "has all the evidence that ^{one} could need". This is to say that when I say I know that p it is not necessarily presupposed that p is true it only implies that it is evident to me that p or that I have "all the evidence one could need to believe that p". Philosophic literature abounds in discussion relevant to this topic. Edmund L. Gettier (1963) in his *Is Justified True Belief Knowledge?* persuasively argues that a speaker S may justifiably be said to know the proposition that p, even though the proposition is a false one provided the proposition is evident to the speaker at the moment of speaking.

We, have thus, arrived at the same scale we proposed in the last chapter. The neg-raisers are used when the speaker himself has reservations about the truth of the complement clause, that is he has virtually no evidence. He uses the say verbs when he has considerable evidence and he is in a position to stake a claim about the truth of the complement clause. For the know verbs to be used appropriately the speaker must have all the evidence to believe in the truth of the complement clause, in other words the truth of the complement proposition is evident to the speaker. The pragmatic principle enunciated earlier explains why the complement clause of know verbs is assumed to be true. There is no question of assuming the truth of the complement proposition of neg-raisers when the speaker himself has doubt^s. Similarly, for the say verbs

the evidence is not sufficient, though strong, to warrant an assumption about the truth of the complement clause. Another factor that we have not explored but which we suspect could be relevant to the discussion is that the strong assertives are verbal acts whereas the know verbs are mental acts (Hooper 1975:95). One can exercise a lot more control over one's verbal acts than one's mental acts, one may thus perversely maintain something, but one may not perversely know something. It is not unnatural, therefore, that the hearer assumes that the complement clause is true when the speaker knows that p - but not when the speaker maintains that p.

Having sorted out the other issues we now need to provide some explanation for the non-symmetry in the behaviour of the cognitives with respect to the environment Q + THAT clause. That is, why is it that in (132) the truth of the THAT clause is presupposed but not necessarily in (131)

(131) Did you discover
 find out that you had not told the truth?
 learn

(132) Did you realize
 ?know that you had not told the truth?
 notice

It is clear that the verbs in (131) are of a somewhat different nature from those in (132), even otherwise. For instance (133) is grammatical, but (134) seems somewhat odd:

(133) He is trying to discover what must have really
 find out
 happened.

(134) *He is trying to realize what must have really happened.
 know

Moreover the verbs of (131) do not share the aversion for the continuous aspect that the verbs of (132) exhibit:

(135) He is finding out what must have happened.

(136) ?He is discovering that he hadn't acted wisely.

(137) *He is knowing what must have happened .
 realizing that he hadn't acted wisely .

That realize and know are "stative" whereas find out and discover are "progressive" is brought out by these sentences:

(138) For how long have you known that you hadn't
 realized acted wisely?

(139) *For how long have you found out that you hadn't
 discovered acted wisely?

(140) How long did it take you to discover that you hadn't
 find out acted wisely?

(141) ?How long did it take you to know that you hadn't
 realize acted wisely?

Even adverbs which are suitable when used with find out, discover appear to be out of place with know and realize:

(142) I am sincerely trying to find out what must
 carefully discover have really happened.
 meticulously

(143) *I am sincerely trying to know what must
 carefully realize have really happened.
 meticulously

The difference between the two types of cognitive verbs can, perhaps, be related to the well established task-achievement distinction that Ryle made in his Concept of Mind. The task verbs are "durative" and describe a process - whereas the achievement verbs describe the terminal point of a process and are therefore states. Even the test that Fillmore (1971) provides for task and achievement verbs is applicable in this case. Fillmore pointed out that the modal may can occur only in the epistemic sense with achievement verbs and never in the "permission granting" pragmatic⁴ sense. For task verbs, however, there is no restriction of this kind: the modal may may be interpreted in both the epistemic and the "pragmatic" sense.

(144) He may know the answer.

(144) can only be interpreted as the speaker saying that there is a possibility that the subject of the sentence knows the answer. Whereas (145) is open to two interpretations:

(145) He may find out the answer from the book.

may either be interpreted as a possibility that he will find out the answer in the future or that the speaker grants him the permission to find out the answer. Given the distinction it is not difficult to provide a rationale for the syntactic peculiarities of these verbs. The task verbs, because they are "durative", occur in the continuous aspect, take active

adverbs like meticulously etc., occur in the environment
how long did it take you rather than for how long have
you etc.

If verbs like discover, find out are durative, then it means that "all the evidence one could need" to assert from a position of absolute strength has not yet been gathered; the process is on. It is quite natural, then, that the hearer does not assume the truth of what is being asserted for the simple reason that the speaker himself concedes that "all the evidence one could need" is not yet in. These verbs in the environment Q + THAT clause do seem to have an inchoative reading:

(146) Have you discovered that he is a crook?
 found out

and they are not, therefore, factive verbs in this environment. But with sentential complements the reading is "perfective" and not "durative":

(147) I found out that he was a crook.
 discovered

that is, the process of gathering all the evidence one could need is complete, and one can assert from a position of absolute strength that the complement proposition is true.

Recapitulating briefly, we seem to have come to following conclusions:

(1) Emotives are factives in all environments
 (Rosenberg's pragmatic principle).

(2) Cognitive strong assertives are factives when they take sentential complements (our pragmatic principle).

(3) Cognitive achievement verbs (but not task verbs) retain their factivity in the environment Q + THAT clause.

The questions that we set out to answer therefore have the following answers:

(1) There is no common element between the true-factive (emotives) and the semi-factive (cognitives) which accounts for the factivity of these verbs when they occur with sentential complements. Two different pragmatic principles account for their factivity in this environment.

(2) Emotives retain their factivity in conditionals because of a pragmatic principle which, however, does not constrain the cognitives in the same way.

(3) The achievement strong assertive cognitive verbs retain their factivity in the environment Q + THAT clause — but the task cognitive verbs shed their factivity in this environment.

Apart from the fact that the pragmatic approach suggests answers to these questions — it has a further virtue. It renders the concept of factivity immune from a possible source of criticism. Austin (1962a) had suggested that performatives are non-truth functional. Ross (1971) has argued that all declarative sentences are embedded under

abstract performative verbs at the underlying level. Which is to say that at the level where the semantic interpretation takes place all declarative sentences are seen to be performatives. Coupling the findings of Austin and Ross we arrive at a position where we must conclude that no declarative sentence at the level of semantic interpretation is truth functional. Which means that only verbs when they are used in non-declarative environments can, at times, lend themselves to a truth functional analysis.

The pragmatic approach does not need to concern itself with this tangle, because it contends that no verb is factive per se; it is only certain pragmatic principles which render definite sets of verb factive in definite environments.

CHAPTER IV

IMPERATIVES IN BENGALI

Katz and Postal (1964) took a step in the right direction by incorporating the IMP and the Q in the deep structure of sentences; but clearly this was insufficient as it stood. A native speaker of the language has no difficulty in differentiating between a command and a request, or between requesting and imploring. Admittedly, some of the exact communication intention is conveyed by the context and by paralinguistic features, but these must be in consonance with the appropriate linguistic features themselves.¹ A command (indicated by paralinguistic features) accompanied by linguistic features characteristic of requests is likely to be as grotesque as it will be incomprehensible. Moreover, it has convincingly been pointed out that even the limited goals of Katz and Postal are not achieved by their formulation; the optional deletion of the second person subject is not all that there is to the semantic interpretation of an imperative sentence. When a bandit with a revolver pointed at a person says:

(1) Move and I will blow out your brains!

it can lead to fatal consequences if the poor victim abides by the "insights" of Katz and Postal (i.e. inserting the second person subject) and acts accordingly. (1) is a paraphrase of
(2)

(2) Don't move or I will blow out your brains.

The synonymy of (1) and (2) cannot be accounted for by a simple rule like "or rewrite as and" in the context "deletion of second person subject and negative operator of the IF clause". (The left most clause is indeed a clause that states a condition. (1) and (2) are in some ways similar to (3)

(3) If you move I will blow at your brains.

This rule will lead to bizzare interpretations of sentences like (4) and (5)

(4) Apologize and I will forgive you.

(5) Work hard and you will be rewarded.

For they will now be synonymous with

(6) Don't apologize or I will forgive you.

(7) Don't work hard or you will be rewarded.

No matter how grammatical (6) and (7) are syntactically — they can only sound normal in a very abnormal situation. There is no getting away from the fact that the synonymy of (1) and (2) on the one hand and non-synonymy of (4) and (6) or (5) and (7) on the other — has something to do with the fact that getting one's brains blown off is not something which one looks forward to with the same enthusiasm as being forgiven or getting rewarded. That is subject to the condition that the world is not more weird than it really is. Katz and Fodor's (1964) attempt to relegate these peculiarities to the realm of the "knowledge of the world" is neither convincing nor helpful.

No "idealized" (non-idiosyncratic) native speaker of the language is likely to have any doubts about the fact that getting one's brains blown off is not a pleasant affair, whereas getting rewarded is. For if this were not so, the existence of such words like "masochistic" and "sadistic" would be very difficult to explain. Reward and punishment have to be kept apart by the feature (\pm pleasurable). If a semantic theory cannot do it so much the worse for it. Furthermore there is an element of "or else" built into the semantic structure of the lexical item "punishment" - and it is therefore natural that wherever there is the implication of punishment - there is a corresponding "or" transform:

9. Move and I will blow out your brains.

(punishment, - pleasurable)

10. Don't move or I will blow out your brains.

But when the second conjunct has the feature (+ pleasurable) i.e. there is no "or else" condition obtaining - then there is no "or" transform corresponding to the "and" construction. That is, whereas (9) and (10) are synonymous (11) and (12) are not

(11) Work hard and you will get a raise.

(reward, + pleasurable)

(12) Don't work hard or you will get a raise.

As a first approximation the rule will look something like this:
A conjunction may be rewritten as a disjunction if the second

conjunct pertains to a (- pleasurable) state of affairs subject to the condition that the (± negative) feature of the first conjunct is reversed.

This is to say, if the first conjunct is positive in character it will become negative (9-10) when the rule has applied; if however, it is already negative it will become positive:

(13) Don't study and you will fail.

(14) Study or you will fail.

This means that the synonymy of (1) and (2) and the non-synonymy of (4) and (6) or (5) and (7) is rule governed and predictable - and therefore need not be relegated into the amorphous realm of the "knowledge of the world", provided we do not fight shy of relevant non-syntactic information being taken into account. On the other hand, if we do, we must fail to explain features which are obvious to any native speaker of the language. The necessity of incorporating "world view" (one aspect of pragmatics) into the grammar is not being argued for. These tentative remarks have been made to demonstrate that the alliance between Katz and Fodor and Katz and Postal has led to a very impoverished view of grammar. The draw-backs of Katz and Postal's analysis of imperatives have been condoned on theoretical grounds by the indirect implications of Katz and Fodor.

Having raised this doubt about KP and KF we should like to produce more non-controversial and more conclusive

evidence to show that imperatives need to be studied in greater detail. And this can only be done meaningfully, if a particular aspect of pragmatics i.e. "speaker attitude" is allowed to play a generative role. Without anticipating ourselves overmuch, we should like to indicate that a sub-categorizing of imperatives is sorely necessary. The mystery of the different behaviours of (1) on the one hand and (4) and (5) on the other lies in the recognition of the fact that (1) is a threat and (4) and (5) are inducements — even though both (1) and (4 and 5) have been placed under the broad head of imperatives.

Consider the following sentences in Bengali. The cognitive meaning of all the sentences is simply this: the speaker asks (this may include desire, request, beg, implore, order) the addressee to come to the "place of locution".² The sentences are in the (- honorific) register³; the subject (tumi) has been deleted — as is usually done — because the shape of the verb can uniquely specify the pronominal subjects. We give the gloss of the first sentence only:

(16) ekhaane esho

here come

come here.

(17) esho ekhaane

(18) ekhaane eshoto

(19) ekhaane esho ektu

(20) ekhaane eshonaa

(21) ekhaane eshonaa baabaa

Even though (16-21) are cognitively similar – a native speaker of Bengali has no doubts whatsoever that there is (however slight) a distinct difference between the sentences. He would never think of using the sentences interchangeably i.e. he would find (17) totally inappropriate⁴ when a situation called for (21). The difference between (16) and (17) is that in (17) there is a distinct ring of menace – which one does not find in (16). The difference between (16) and (17) (word-order) cannot be taken care of by the notions "focus" or "fronting". Neither can the difference between the sentences be attributed to the semantic content of the extra items in (18) (to), (19) (ektu), (20) (naa), and (21) (baabaa). The to of (18) has no semantic content – so it is not clear how the categorial component of the base can generate it and since it is a particle that has no semantic content, it is therefore extremely doubtful whether the semantic component can come to our rescue. The particle ektu in (19) literally means "a little" – but can sentence like (22) mean?

(22) Come here a little.

The futility of exploiting the semantic content of ektu becomes obvious in a sentence like

(23) ektu kolomtaa daao

a little pen (Article) give

•
Give me the pen a little.

Does one mean that the pen should be broken and only a little part of it given? Similarly (24) cannot be interpreted in a meaningful way if the semantic component is made to shoulder the entire burden

- (24) dorjaataa ektu khule daao
 door (Article) a little open do
 Open the door a little.

The request is definitely not that the door should be opened partially. If it were, we should use (25)

- (25) dorjaataa ektu khaani khule daao
 door (Article) a little amount open do

The (naa) of (20) poses greater problems. The literal meaning of naa is not. Even though (20) can be interpreted to mean "Don't come" — the intended meaning of (20) is the very opposite; it almost implies imploring a person to come. The distinction between the two meanings becomes clear when the particle ektu is added to (20)

- (26) ekhaane ektu eshonaa

in the intended sense i.e. of a request to come — the sentence is impeccable — but in the other sense i.e. forbidding one to come — the sentence is ungrammatical. The distinction in Hindi is more overt. In Hindi the corresponding particle is na — but (27) can only be interpreted in the intended sense:

- (27) idhar aaona

In the sense of forbidding it is (28) that has to be used:

(28) mat aao

The baabaa of (21) poses similar problems; the literal meaning of baabaa is "father" - but in (21) in the intended sense it is not at all used in the vocative case. One could use the sentence appropriately even with one's children, brother, sister, wife or anybody intimate with the speaker.

These features are not an idiosyncrasy of Bengali either. The situation in Hindi is very similar. (29) is a paraphrase of (16)

(29) idhar aao

(30) aao idhar

(31) zaraa idhar aao

(32) zaraa idhar aaoto

(33) zaraa idhar aaona

(30) is different from (29) in the same way as (17) is from (16); zaraa functions in the same way as ektu and to and na seem to be no different from the to and naa of Bengali. That is zaraa (literally "a little") cannot be interpreted in this way in either (31) or (34)

(34) zaraa darwaazaa khol do

a little door open do

If the intention is to request the addressee to partially open the door - (35) is more likely to be used

(35) darwaazaa zaraasaa khol do

saa here functions in the same^{way} as the Bengali khaani; thus if one wanted to say that a little salt should be added to the soup one would say

(36) suup me zaraasa namak daalo

soup in little amount salt drop

The function of na (literally not) has already been explained in (27-28).

We, therefore, find that the particles which appear regularly in imperative sentences in Bengali and Hindi cannot be handled by either the syntactic or the semantic component of the standard and the extended standard models. Even if we choose to distrust our semantic intuitions — even though we will presently show that it is extremely unwise to do so — our problems are not solved. These particles have regular and unmistakable selection restrictions.

(37) ektu ekhaane esho

(38) ekhaane esho ektu

(39) ?esho ektu ekhaane

(40) ekhaane eshoto

(41) *ekhaane to esho

(42) *to ekhaane esho

(43) *eshoto ekhaane

(44) ekhaane eshona

(45) *ekhaane naa esho

- (46) *naa ekhaane esho
 (47) ?esho naa ekhane
 (48) ?ekhaane esho baabaa
 (49) *ekhaane baabaa esho
 (50) *baabaa ekhaane esho
 (51) *esho ekhaane baabaa
 (52) *ekhaane ektu esho baabaa
 (53) *ektu ekhaane esho baabaa
 (54) *esho ekhaane baabaa
 (55) *ekhaane esho to baabaa
 (56) *ekhaane esho baabaa to
 (57) *ekhaane eshonaa baabaa
 (58) *ekhaane esho baabaa naa
 (59) ?esho naa baabaa ekhaane

The pattern that seems to be emerging is as follows:

(a) ektu has relative freedom of movement – only it seems rather odd with the inverted word order (39)⁵

(b) to must follow the verb – it cannot occur when the order is inverted

(c) naa must follow the verb – it cannot occur when the word order is inverted

(d) baabaa follows naa – it cannot occur when the word order is inverted.

ektu seems to behave somewhat like the English please

(60) Please, come here.

(61) Come here, please.

to, naa and baabaa and particles of this kind have no corresponding forms in English. The only way of taking care of these selectional restrictions would be to resort to lexical markings. This could be done, of course, if we could decide which category in the deep structure to place them in, and provided we could find what syntactic features define these particles.⁶ Any attempt to meet either of these two conditions — would require resorting to extremely questionable and ad hoc methods. When it is doubtful whether they can be entered in the lexicon at all — there cannot be much point in thinking of lexical markings. There is, however, a clear rule that can be formulated:

$$(ektu) \text{ Adv. } V \left(\begin{array}{c} \text{naa (baabaa)} \\ \text{to} \end{array} \right)$$

The movement rules will specify the position ektu can or cannot occur in. This rule may be in need of further refinement — but there is very little doubt that the occurrence of the particles is patterned and predictable.

Let us briefly examine the social situations in which the use of the particles could be considered appropriate.

(17) we have already said has a ring of menace associated with it. That is to say it sounds more like an order or

threat; there is no show of affection or desire to appeal. The speaker is presumably in a stronger position than the addressee which permits him to adopt this menacing tone. It would be quite appropriate for an erring child to be addressed either by a parent or teacher in this tone. And if he were so addressed — he would be wise to be mentally prepared for some impending punishment. Conversely if the intention of the parent (or teacher) was to ask the particular child to approach with a view to giving him a prize — the tone would be hopelessly inappropriate. Similarly if a child were to adopt this tone while addressing his teacher — there would be good reasons to suspect that the upbringing of the child was improper. This would be so, even if the proper register (+ honorific) were adopted. In the situation just described (62) would cause as many eyebrows to be raised as (17)

(62) aashun ekhaane aapni

Similarly if a servant were to address his master in this fashion — the servant would be in serious danger of losing his job on the ground of being insolent.

The problem at hand cannot be dealt with notions like "Fronting" or "Topic" and "Presuppositions" for our requirements are not met by saying that in (16) the "coming" is presupposed and the "location" is being asserted; and in (17) it is the "location" that is presupposed and it is the "coming" that is being asserted. Nor are we anywhere near what we want by

saying that in (16) prominence is given to the "location" and in (17) it is the "coming" which enjoys the prominence. What we need to say is that (17) is an order/threat whereas (16) does not carry this overtone.

Whereas (21) on the other hand has a ring of helplessness - the speaker seems to ^{be} pleading and imploring - there is a lot of affection that one can discern. The sentence would be used in a situation where the speaker apprehends that there may be reluctance on the part of the addressee to comply with the request and the speaker really does not have (or does not choose to show that he has) any power to make the addressee comply with his request. In other words, the speaker is in a weak position. The sentence may easily be used by parents when they want to persuade their children to do something without wanting to exercise their parental authority. Children could, of course, use it with their parents.

The use of (21) also presupposes a certain amount of informality and familiarity. Thus a teacher may use it when he wants to cajole his students into doing something which they may be reluctant to do otherwise, but a student may never use it - however helpless he may feel in a conversational situation with his teacher. In a more formal situation, let us say between a Director and an ordinary employee of an Institute - the Director, if he chooses, can break down the barrier of formality and condescend to show affection and familiarity with

the employee by using this sentence. But the poor employee, whatever his feelings about the Director really may be, cannot but appear extremely presumptuous if ^{he} were to use (63)

(63) ekhaane aashun naa baabaa ektu

if the poor employee had to exhibit his helplessness he would have to use some variant of (64)

(64) ekhaane doayaa kore aashun ektu

here to mercy do come a little

Kindly come here.

Conversely if the Director were to use this sentence in a conversational situation with an employee, there could be no doubt that the Director was being ironical and sarcastic.

It is clear, therefore, that the particles and the word-order can have a crucial say in deciding whether a particular utterance is appropriate in a given situation and therefore should be of concern to the linguist who has ambitions of describing the language capacity of man.

At one end of the scale therefore we have commands and threats where the speaker is in a strong position; there is no demonstration of affection and the attitude is that of belligerence. The syntactic peculiarity of imperative utterances of this kind is that the word order is usually inverted and these utterances are totally intolerant of any particle. At the other end of the scale we have imploring and cajoling - where the speaker is in a weak position; there is

an overt demonstration of affection and familiarity. These utterances happily co-occur with more than one particle subject, of course, to the selectional and co-occurrence restrictions (that is to and naa cannot co-occur, baabaa must follow naa etc. etc.). These particles cannot co-occur when the word-order is inverted.

Though naa and to seem to belong to a disjunctive set (they may not co-occur and both must immediately be preceded by the verb) – there is a distinct difference between the two particles. One is the obvious one that baabaa may follow naa but not to. There is also a corresponding semantic-pragmatic distinction between (65) and (66)

(65) ekhaane ektu eshoto

(66) ekhaane ektu eshona (baabaa)

In (66) there is definitely an undertone of utter helplessness, almost a suggestion that the speaker is aware that there is or can be a reluctance to comply with the request and the speaker can only win over the addressee with cajolery. Whereas (65) is nowhere as compromising as (66) – even though the position of the speaker is weak – the sense of desperation implicit in (66) is lacking in (65). In Hindi, the situation is somewhat similar. (67) does not reflect the same amount of desperation as in (68)

(67) idhar aaoto

(68) idhar aaona

ektu and zaraa stand somewhere in the neutral position; the speaker is neither strong nor weak. The use of the particle is more a matter of politeness — an attempt to assuage the feelings of the addressee lest he construe the utterance as an order.

Both (69) and (70) are used in this kind of situation

(69) ektu ekhaane esho

(70) zaraa idhar aao

In (71), however, there is no doubt that the speaker has shaken off all signs of diffidence and clearly expects the addressee to comply with the request/order

(71) ekhaane esho

similarly in Hindi (72) is more akin

(72) idhar aao

to an order than a request. We have already discussed the consequences of the inverted word order earlier. We are thus left with a scale of the following kind:

Speaker strong

Speaker weak



1. Inverted word order, no particles.

Speaker attitude — belligerent

Illocutionary mode — Command/Threat

2. Normal word order, no particles.
 Speaker attitude — authoritative/firm
 Illocutionary mode — Order
3. Normal word order — with ektu/zaraa
 Speaker attitude — courteous but firm
 Illocutionary mode — Firm request
4. Normal word order — with to (ektu/zaraa)
 Speaker attitude — affectionate but firm
 Illocutionary mode — Affectionate but firm request
5. Normal word order — with (ektu/zaraa) naa/na
 Speaker attitude — affectionate and/or diffident
 Illocutionary mode — Pleading
6. Normal word order — with (ektu) naa baabaa
 Speaker attitude — affectionate and/or desperate
 Illocutionary mode — Imploring.

The distinctions may be in need of further refinement but overt imperatives in Bengali can broadly be classified in these six categories and it is clear that "speaker attitude" plays a crucial role in this kind of classification. The somewhat hazy distinctions are perhaps due to the fact that language itself must act as its metalanguage. The difference between (5) and (6) is reasonably clear — the dictionary reading for plead is to ask earnestly whereas for implore it is

request earnestly. The difference between (5) and (6) is reasonably well captured - but the difference between (3) and (4) cannot be brought out because of the paucity of suitable terms.

This notion of speaker attitude - weak and strong - is not something necessary for the description of imperatives in Bengali only. Even in English the difference between various kinds of imperatives can be described in an intuitively more satisfying way if we make use of this concept. The difference between (73) and (74) can easily be described if we take recourse to this mechanism:

(73) I forbid you to use strong language.

(74) I implore you not to use strong language.

Ignoring the fact that forbid has a negative element built into its semantic structure which must be compensated for by the overt addition of 'not' with implore, the difference between (73) and (74) is not difficult to grasp. (73) is "stern", "repellant" and "threatening"⁷ - whereas in (74) it is the very opposite. But to whom (or what) should this stern, repellant and threatening attitude be ascribed? The most normal way would be to ascribe it to the speaker. The appropriateness condition clearly demonstrates that the difference needs to be defined on the basis of the attitude of the speaker and the relative position of strength/weakness of the speaker with respect to the addressee. Sentence (75) is therefore quite natural and normal:

(75) God forbade Adam to taste the fruit of knowledge.
 whereas (76) would sound extremely deviant to any God-fearing Christian:

(76) ?God implored Adam not to taste the apple of knowledge.
 The unnaturalness of (76) cannot be attributed to the "knowledge of the world" (The Old Testament in this case) — for it would strike anybody who is aware of the lexical item God and its meaning that — implore is not the appropriate word to use.

Conversely, for Herod to have ordered Salomme not to ask for the head of John the Baptist would have been extremely inappropriate. In the Herod-Salomme situation (77) would be more appropriate than (78)

(77) Herod implored Salomme not to ask for the head of John the Baptist.

(78) ?Herod forbade Salomme to ask for the head of John the Baptist.

And this is because Herod having bound himself by a promise was neither in a position to use his parental nor his kingly authority. He was in a weak position. The adoption of this (speaker attitude) formula also provides a natural explanation for certain selectional restrictions:

(79) I strictly forbid you to use strong language.

(80) *I strictly appeal to you not to use strong language.

(81) I earnestly appeal to you not to use strong language.

(82) *I earnestly forbid you to use strong language.

The dictionary entry for strict is requiring implicit obedience; the entry for obedient is submissive. The co-occurrence of strict with forbid is easily explained. The speaker of (79) is strong and conversely the addressee, submissive - therefore there is no contradiction involved. But the attitude of the speaker in (81) is weak, therefore, he cannot adopt an attitude of authority - the adverb earnestly, thus, is quite in order. But when strict (strong speaker attitude) co-occurs with appeal (weak speaker attitude) - the sentence (80) becomes ungrammatical. Conversely when forbid (strong speaker attitude) co-occurs with earnest (weak speaker attitude) - the sentence (82) is rendered ungrammatical.

However, when the adverb is not marked for "speaker attitude" - that is, it is neutral with regard to this feature - it can co-occur with both strong and weak speaker attitude imperatives:

(83) I purposely forbade you to use strong language.

(84) I purposely appealed to you not to use strong language.

Not only "illocutions" but "perlocutions" are more easily explained if we accept this formulation. The difference between (85) and (86) can clearly be made along this parameter.

(85) I prevented him from using strong language.

(86) I persuaded him not to use strong language.

The cognitive content of both (85) and (86) is

X cause Y not to do Z

whereas in (85) it is clear that X (the speaker) is in a strong position and therefore can exercise his authority to bring about the desired effect; in (86) he is in a weak position and must therefore take recourse to non-authoritarian methods.

In Bengali too selectional restrictions are easily taken care of if we adopt this formulation. Consider the following sentences in Bengali:

(87) raam korun bhaabe minoti korchhe taake

Ram sad way implore do he (accusative post position)

jæno chheRe dewaahoe

so that released give (infinitive) happen

Ram is tearfully imploring (him) that he be released.

(88) *raam driRo bhaabe aagāa korchhe (je) taake

Ram firm way order do he (accusative post position)

jæno chheRe dewaahoe

so that released give (infinitive) happen

Ram is firmly ordering him that he be released.

(89) raam driRo bhaabe aagāa korchhe taake chheRe

Ram firm way order do he (accusative post position) leave

daao

do

Ram firmly orders "Release him".

(90) *raam korun bhaabe aagāa .:.....

(91) *raam driRo bhaabe minoti korchhe

There are two things to note here - mincti (implore - speaker weak position) can co-occur with korun bhaabe (tearfully - speaker weak position) but not with driRo bhaabe (firmly - speaker strong position). Conversely aagāa (order - speaker strong) can co-occur with driRo (firm - speaker strong) but not with korun bhaabe (tearfully - speaker weak). But this was only to be anticipated considering what has gone earlier. But the more interesting thing here is that (87) is in the subjunctive mood whereas (89) is in the imperative. It is, atleast in Bengali, quite natural to use the subjunctive mood for the embedded clause in a sentence where the matrix verb is a weak-speaker-attitude verb. Thus both (92) and (93) are quite grammatical

(92) aamī ishorer kaachhe praarthonaa kori tomaar mōgol hok

I god to near prayer do your good happen (subjunctive)

(93) aamī ishorer kaachhe praarthonaa kori tini

I god to near prayer do he

tomaar mōgol korun

your good do (subjunctive)

In English too, the verbs that take embedded clauses in the subjunctive mood are weak-speaker-attitude verbs. Thus hope, wish, pray are all weak-speaker-attitude verbs:

(94) I hope it rains tomorrow.

(95) I wish he would come.

(96) I pray that you may get well.

(97) *I order (that) it rains tomorrow.

(98) *I order he would come.

(99) *I order that you may get well.

Again the subjunctive verbs co-occur with weak-speaker-attitude adverbs – but not with strong-speaker attitude adverbs:

(100) I earnestly hope it rains tomorrow.

(101) I earnestly wish it would rain tomorrow.

(102) I earnestly pray that you may get well.

(103) *I strictly hope it rains tomorrow.

(104) *I strictly wish it would rain tomorrow.

(105) *I strictly pray that you may get well.

We encountered some difficulty in finding suitable terms for the different categories in the six-point scale that we tentatively adopted for imperatives in Bengali. Bengali, itself, however is considerably rich in terms necessary to describe the different shades of imperative utterances. As a first approximation we may adopt the following terminology beginning from the strongest speaker attitude and descending to the weakest:

- 1) aagāa
- 2) nirdesh
- 3) aadesh
- 4) onurodh
- 5) onunoy
- 6) minoti

Further refinements would also be possible if the intonation pattern could be taken into account. For instance, minoti with the requisite intonation could become kaakuti - which would occupy a position below minoti. Again with the requisite intonation aagāa would become a dhomok - a position even above aagāa. But characterizing these further categories on purely syntactic and pragmatic grounds may not be possible. That is for further sub-categorization the help of the phonological component becomes indispensable. However, there would be no clash between the pragmatic and the phonological characterization. That is to say, the phonological component could further refine the characterization but would not yield results incompatible with the pragmatic categorization. Which is to say, for instance, that no matter how a minoti was intoned it would never be interpreted as a dhomok; conversely an aagāa with no amount of intonational ingenuity be interpreted as a minoti. Tentatively, then, for our purposes the scale may be allowed to stand.

Another glaring omission in the Katz and Postal formulation was that they saw the IMP and the Q as disjunctive categories in the deep structure of sentences. That is, they left no provision for possible lack of symmetry between the overt syntactic structure and the covert - yet reasonably obvious - semantico-pragmatic function. Bolinger (1967) pointed out that some utterances with the overt form of interrogatives - can act as imperatives. For instance

(105) Will you please go home?

is normally never interpreted as a yes/no question; it is more naturally interpreted as a request like

(106) Please go home!

Green (1975) points out that these utterances are not be interpreted as requests for information but requests for actions. Not only can yes/no questions function as imperatives – but even some Q word questions can discharge this function:

(107) Why don't you go home?

The imperative interpretation (105) is not contingent solely on our semantic intuitions. The presence of such adverbs like please leave no doubt – that these utterances function like imperatives. When an utterance is a question both overtly and covertly – it cannot co-occur with adverbs of this kind:

(108) *When was Shakespeare born, please?

(109) *Who discovered the Law of Gravity, kindly?

(110) *Was Einstein a Nazi, for heaven's sake?

(111) Will you please go home?

(112) Will you kindly go home?

This is to say utterances with the syntactic shape of questions may yet function as imperatives. This lead Green (1975) to coin a term WHIMPERATIVES to refer to this kind of utterances.

Saddock (1974) agreeing with this kind of formulation calls them QUECLARATIVES. The empirical consequence of the Katz and Postal attempt to allow the

semantic component to operate uniquely on the syntactic structure generated by the base component (which incorporates the "lexicon") without making any reference to the pragmatic function is that it leads to counter-intuitive and unsatisfactory results.

The pragmatic function of WHIMPERATIVES is easily explained if one takes "speaker-attitude" into account. (106) is a direct request - whereas (105) which is in the form of a question - leaves the addressee an outside chance to pretend to have misinterpreted the import of the utterance (i.e. by pretending that it is an yes/no question) - and, thus, saving both the speaker and the addressee the embarrassment that might arise out of the non-compliance with the request. Whereas, in (106) this possibility is ruled out; there is no provision for this face-saving device.

But when would it be appropriate to use (105) and when would (106) be in order? (106) is a straightforward request - the attitude of the speaker is on the weaker side - the exact position in the scale will largely depend on the intonation. In (105) - since there is a necessity to resort to this face-saving device - clearly indicates that the position of the speaker is pretty weak (weaker than the position of the speaker of (10)) and there is a clear apprehension that the request may not be complied with.

In Bengali the WHIMPERATIVES seem to follow the same pattern as the overt imperatives. Consider the following sentences:

(113) ekhaane ektu aashb.

Here a little come (future)

Will you (please) come here?

(114) ekhaane ektu aashbenaa

(115) *ekhaane ektu aashbenaa baabaa

(116) *ekhaane ektu aashbe to

This clearly means that (113) belongs to the amunoy zone but neither to the minoti nor the anurodh zone. And this is quite natural: when one feels the necessity of resorting to this kind of anticipatory face-saving device one may neither directly request nor make an open show of affection and one's desperation. For in either case pretences cannot be kept up — which is the major motivation behind the adoption of this mode.

In Hindi too a similar situation obtains:

(117) (zaraa) idhar aaoge?

(118) idhar aaogena?

But in Hindi, perhaps, the WHIMPERATIVES are not as immediately discernable as those in English and Bengali.

Recapitulating what we have said in this chapter,

1) The Standard and the Extended Standard models have no natural, non-ad hoc, and non-arbitrary mechanism to generate the particles which regularly occur in Bengali

imperatives - even though these particles have definite and definable syntactic and semantico-pragmatic functions. Taking "speaker-attitude" into account, however, enables us to naturally "generate" these particles and it helps us to categorize the imperatives in a reasonably adequate way. Moreover, the appropriateness condition requires that these imperatives be further sub-categorized.

2) Incorporating "speaker attitude" into grammar - provides for a better explanation of English imperatives, as well as "locutions" and "perlocutions"; the selectional restrictions are taken care of in an intuitively satisfying way if this formulation is accepted.

3) The phenomenon of WHIMPERATIVES - which cannot be accounted for by the Katz and Postal hypothesis - not only lends itself smoothly to this kind of pragmatic analysis but a rationale for their use can also be ascertained.

CHAPTER V

PERSONAL PRONOUNS AND SOME PARTICLES

There are some aspects in Indo-European languages (of which we will examine Bengali and Hindi as representative cases) which but fit uneasily in the Style-Register distinction made in the literature. The usual examples of Register are drawn from the language used by grown ups in conversational situations with babies. Joseph Priestly (1768) noted that in addressing babies we often make a departure from normal usage: "will the baby boodlum havums teeny weeny drinkum now? Will he then! There now! Mummy wipum baby's mouffy"¹. Sapir in his Abnormal Types of Speech in Nootka (in Mandlebaum (1958:170) saw the problem somewhat differently: "An interesting cultural and linguistic problem is the use in speech of various devices implying something in regard to the status age or other characteristics of the speaker, person addressed or spoken of, without any direct statement". Michel Breal in his Essai de Semantique (1897) had noted that in Cambodian - even the simple act of eating required different lexical realizations depending on whether the person involved was a king, a chief or an ordinary person.

We should like to examine data of the kind Sapir and Breal mention, without, however, any suggestion that such data are abnormal as the title of Sapir's work may inadvertently

suggest. The phenomenon under discussion has nothing abnormal about it; it is to be found in each step of everyday speech, which is, therefore, an integral part of the intrinsic competence of the native speakers of these languages.

We should like to anticipate an objection at this stage. The Generative Syntactic model is most likely to contend that features of the kind Breal and Sapir mention are beyond the purview of generative grammars because they are contingent on knowledge of the world and, therefore, belong to the realm of performance. But it must be noted here that features of the kind Sapir mentions form very much a part of the intrinsic competence of the native speaker of the language, and if his internalized grammar does not have pragmatic features of the requisite kind, he has no way of marking (1), (2), (5) and (6) as being grammatical and (3), (4), (7) and (8) as ungrammatical even though it is unmistakably clear to all native speakers of these languages that it is so.

(1) aapni kothae jaachhen

You where to go
(+honorific) (present continuous)
+honorific

Where are you going?

(2) tumi kothae jaachho

You where to go
(-honorific) (present continuous)
-honorific

(3) *aapni kothae jaachho

You where to go
 (+hon) (present continuous)
 -hon

(4) *tumi kothae jaachhen

You where to go
 (-hon) (present continuous)
 +hon

(5) aap kahāa jaa rahe hāi

You where go
 (+hon) (present continuous)
 +hon

(6) tum kahāa jaa rahe ho

You where go
 (-hon) (present continuous)
 -hon

(7) *aap kahāa jaa rahe ho

You where go
 (+hon) (present continuous)
 -hon

(8) *tum kahāa jaa rahe hāi

You where go
 (-hon) (present continuous)
 -hon

The native speaker of these languages needs no knowledge about the private belief system of individuals, any knowledge of the context of the utterance or the cultural mores of any particular speech community to make the distinction between (1), (2), (5) and (6) on the one hand and (3), (4), (7) and (8) on the other. On the contrary, a speaker of these

languages who fails to make these judgements cannot be said to know these languages. The grammar then cannot escape the responsibility of making an explicit statement on the grammaticality of one set and the palpable ungrammaticality of the other. And yet, Generative Syntax (as we propose to argue later) has no non-ad hoc way of making this necessary distinction. It might be argued that (7) and (8) are ungrammatical because there is a concord rule of number that has been violated: aap is plural and tum is singular, similarly hāi is plural and ho is singular. But this rule must be rejected on grounds of observational, descriptive and explanatory adequacy.

Observational Adequacy: It is true that aap (like the English you) is ambiguous between singular and plural - it must be noted that even when other items in the sentence make it clear that aap is being used in the singular - hāi still occurs

(9) aap akele kahāa jaa rahe hāi

You alone where go
(present continuous)

similarly tum even when it is used in the plural takes ho

(10) tum log kahāa jaa rahe ho

You people where go
(present continuous)

Descriptive Adequacy: It is intuitively clear to the native speaker of Hindi that the significant difference between tum and aap (and between sentences (5) and (6)) is not of number but of register.

Explanatory Adequacy: A statement that aap even when it is semantically singular is syntactically plural just as tum even when it is semantically plural is syntactically singular, will run into difficulties with the Bengali cognates. In Bengali aapni is as unambiguously singular as tumi both syntactically and semantically, yet the verbal inflexions exactly correspond with the Hindi ones. Rather than have two rules – one for Hindi (number) and one for Bengali (register), a single register rule can take care of both the Bengali and Hindi sentences. (For further arguments see section on Particles).

The English you which is always syntactically plural is a remnant of the (+hon) realization of the second person pronoun, the original (-hon) realization, thou, has now become obsolete. Brown and Gilman (1960) suggest a political reason why the V realization had to become grammatically plural. That is the V forms are primarily (+hon) and only incidentally plural. Moreover, the co-variance of a dental nasal segment with (+hon) forms is a common feature in many Indo-Aryan languages. All the (+hon) pronouns in Bengali, for instance, have a dental nasal segment.

This feature is not peculiar to Indian languages only. Brown and Gilman (1960) clearly show that the difference between what they call the T and V forms is inextricably interwoven with the language behaviour of the ideal speaker-hearer of many Indo-European languages (French, German, Italian, Spanish,

Polish etc.). Even though the emphasis of their paper is on the appropriateness of the use of T and V forms in socially determined situations and the socio-psychological character of the society in which they inhere, their argument can easily be extended to show that these forms play a crucial role in sifting the grammatical from the ungrammatical.

It is interesting to note that non-TG grammars would not be averse to incorporating aspects of this kind into their analyses. The London School with its pronounced sociological bias ("In the most general terms we study language as a part of social process" or "A key concept in the technique of the London group is the context of the situation ...") Firth (1957:181)) would never ride rough shod over these aspects on the pretext that they called for sociological knowledge of the world. Firth (1957:179) argues that the work of the French linguists Meillet, Brunot and Vendryes and the Slav Schools grouped around Courtenay and later Trubetzkoy and the cercle linguistique de Prague, had firm sociological bases. Presumably then, they would not treat these aspects as taboos in their theory of grammar. Bloomfieldian structuralism, given its pre-occupation with morpheme distribution, would be hard put to ignore the difference between hai (-hon) and hāi (+hon) albeit only to arrange them under different heads. A mentalistic concept of grammar like Sapir's (as we have already seen) also would consider phenomenon of this kind "a linguistically interesting problem".

TGG has depended solely and predominantly on the study of modern English for the empirical conclusions it draws. Even upto the 17th century English, too, had T and V forms. Marlowe in his Tamburlaine makes brilliant and subtle use of it in Act IV

Tamburlaine : Here, Turk, wilt thou have a clean trencher?

Bajazeth : Ay tyrant and more meat.

Tamburlaine : Soft, Sir, you must be dieted: too much eating will make surfeit.

Thou is to be expected from captor to captive – the norm is upset when ~~the~~ Tamburlaine says you. He cannot intend to express admiration or respect, since he keeps the Turk captive and starves him. His intention is to mock the captive king with respectful address. The attitude of the speaker towards the addressee is clearly reflected in the choice of the pronoun.

Even though a case for inclusion of pragmatic features into a grammar so as to account for these aspects has not perhaps been explicitly made, the literature abounds in discussion of these aspects. (see Labov (1966), Erwin-Tripp (1969), Hymes (1967), Argyle (1969), Brown and Ford (1961), Ferguson (1959), Geertz (1960), Robinson (1972), Staples (1971) etc.).

We should now briefly like to discuss the personal pronouns in Bengali and Hindi. The pronominal system in Bengali and Hindi is much more complex and they, therefore require some discussion before we can proceed with the main argument. The tables that follow will serve to characterize the system leaving out those aspects (number, gender etc.) which are not immediately relevant to this discussion. Disregarding other features, we will concentrate on the nominative case, singular number, non-neuter gender.

Table 1

FIRST PERSON

English	I
Bengali	aamɪ
Hindi	māi/ham

Table 2

SECOND PERSON

English	you
Bengali	tui (a)
	tumɪ (b)
	aapni (c)
	tuu (a) ²
Hindi	tum (b)
	aap (c)

Table 3

THIRD PERSON

English	He
	She
Bengali	e (a) ¹ & (b) ¹
	o (a) ² & (b) ²
	she (a) ³ & (b) ³
	ini (c) ¹
	uni (c) ²
	tin (c) ³
Hindi	yeh (a) ¹ & (b) ¹
	voh (a) ² & (b) ²
	ve (c)

Following Sunita Kumar Chatterjee (1970:807:833) we will tentatively classify the (a) in the second person (Table 2) and in the third person (Table 3) as a form indicating "contempt for inferiors or affection for juniors or familiars"; that is tui or tuu can be used when the speaker considers the addressee to be of an inferior social status (Brown & Gilman's power semantics). A master could speak to his servant thus:

(11) tui jaa

you go

(II person
present tense)

(12) tuu jaa

you go

(II person
present tense)

(These sentences sound somewhat awkward, though not ungrammatical or in any way deviant, because there is redundancy involved. In Bengali and Hindi the verb inflects for person (also for gender and number in Hindi), as well as for register and these are in consonance with the corresponding features of the subject. It is, therefore, quite easy to uniquely specify the form of the pronominal subject given the verb. Naturally, therefore, there is a strong tendency to (optionally) delete the pronominal subject in most conversational situations).

This form i.e. (a) is quite frequently used by intimate friends among themselves. It is also used by parents while addressing their children or even by teachers (mostly in schools) while addressing their pupils. Sunita Kumar Chatterjee's classification, therefore, will hold with the qualification that familiarity with parents will not permit the child to use this form while addressing his parents.

The (b) forms (using SKC's terminology once again) are used when referring to somebody "inferior and/or familiar".

(13) (tumi) jaao

you go

(II person
present tense)

(14) (tum) jaao

You go
(II person
present tense)

(13) and (14) can be used by masters to servants, parents to children (and vice-versa), friends among themselves, and by teachers to their pupils (but not vice-versa). The difference between (a) and (b) semantically (or pragmatically as we shall see later) is very difficult to define precisely, the familiarity in (a) is somewhat more pronounced (is this why it tends to breed contempt?) than in (b). In (a) the intimacy has no trace of formality or respect. In (b), in spite of the intimacy, the feature is not totally non-existent. This is why children never adopt (a) while addressing their parents or elders.

The (c) forms are used in more formal situations, between absolute strangers (to indicate "polite distance") and when overt showing of respect is essential. That is, it is normal for pupils to address their teachers in this register; "superiors" and eminent people are also invariably addressed in this register. Sunati Kumar Chatterjee calls this register "Honorific" (Brown & Gilman's V forms).

The super-scripts in the third table, (a)¹, (a)² and (a)³ and (c)¹, (c)² and (c)³ refer to a feature that is not be found in English. The superscript 1 refers to what SKC calls "near demonstrative" and 2 to "far demonstratives".

The difference is akin to the difference between the proximate and non-proximate deictics this and that. That is, the proximity of the person spoken to or spoken about with reference to the speaker is indicated by this feature. In Bengali there is an additional feature which I should like to call reference in absentia if the person spoken about is absent from the **scene** of locution — this form is normally used. I would, therefore, use 3 rather than 2 (1 would be ruled out in any case) if I were in India and referred to a person who is now in England:

(15) *e ækhon bilete aachhe

he now England in is

He is now in England.

(16) ?o ækhon bilete aachhe

he now England in is

(17) she ækhon bilete aachhe

he now England in is

(18) *yeh abhi vilaet mēe hai

he now England in is

He is now in England.

(19) voh abhi vilaet mēe hai

he now England in is

He is now in England.

It will be noticed that (a) and (b) have coalesced in the third person. This is probably because of the very close similarity (pragmatically) that exists between the two registers. This may also account for the non-existence of the (a) register in some dialects of Hindi. Thus

(20) o jaak

he go

(subjunctive)

Let him go.

(21) yeh jaa rahaa hai

he go

(present continuous)

He is going.

could be used either in the (a) or (b) register. The sentences appearing outside a discourse context in isolation cannot uniquely be specified as either belonging to (a) or (b). But with (c) the difference is immediately visible:

(22) *e/o jaan

he go

(a/b) (present)
(c)

(23) *uni/tini/ini jaak

he go

(c) (a & b)

(24) *voh jaayē

he go

(a/b) (c)

(25) *veh jaaye

he go
(c) (a & b)

Even though the distinction is blurred between (a) and (b) in the third person, it is very much visible in the second person:

(26) tui jaa

you go
(a) (a)

(27) tumi jaao

you go
(b) (b)

(28) aapni jaan

you go
(c) (c)

(29) *tui jaao

you go
(a) (b)

(30) *tui jaan

you go
(a) (c)

(31) *tumi jaan

you go
(b) (c)

(32) *tumi jaa

you go
(b) (a)

(33) *aapni jaa

you go
(a) (b)

(34) *aapni jaa

you go
(a) (c)

(35) tuu jaa

you go
(a) (a)

(36) tum jaa

you go
(b) (b)

(37) aap jale

you go
(c) (c)

(38) *tu jaa

you go
(c) (b)

(39) *tu jale

you go
(a) (c)

(40) *tum jaa

you go
(b) (c)

(41) *tum jale

you go
(b) (c)

(42) *aap jaa

you go
(c) (a)

(43) *aap jaao

you go
(c) (b)

It is clear, therefore, that the verb in Hindi and Bengali inflects for register. The verb in Bengali ends with i or a to indicate the (a) register

(44) (tui) baaRi jaa

you home go
Go home!

(45) (tui) kothae jaabi

you where to go (future)
Where will you go?

e and o for the (b) register

(46) (tumi) baaRi jaao

you home go (present)
Go home!

(47) (tumi) kothae jaabe

you where to go (future)
Where will you go?

For the (c) register the Bengali verb ends with a nasal segment:

(48) (aapni) baaRi jaan

you home go
Go home!

- (49) (aapnī) kothae jaaben
 you where to go (future)

Where will you go?

in Hindi the (a) register is marked by a appearing finally:

- (50) (tuu) ghar jaa
 you home go

Go home!

- (51) (tuu) kahāa jaayegaa
 you where go

Where will you go?

the (b) register, with o or e

- (52) (tum) ghar jaao
 you home go

Go home!

- (53) (tum) kahāa jaaoge
 you where go

Where will you go?

and the (c) register, with ie or nasalization

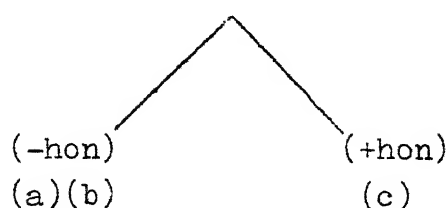
- (54) (aap) ghar jaale
 you home go

Go home!

- (55) (aap) kahāa jaayēge
 you where go (future)

Where will you go?

Ignoring the difference between (a) and (b) or broadly categorizing them under the same head, we can make a two-way distinction (similar to Brown and Gilman's T and V distinction) thus:



The problem to be faced at this juncture is how is this feature to be incorporated in the grammar? The only possible way of defining this feature is with reference to speaker attitude. If the speaker considers the addressee or the person spoken about to be "intimate", "familiar", "socially inferior" or "younger" etc. he uses the relevant register (-hon). If, in the judgement of the speaker the addressee is not "intimate", "familiar" or is "socially superior" older in age (therefore deserving respect) etc., he opts for the (+hon) register.³

In some cases the register is determined by social norms. Thus, a millionaire's son must still adopt the (+hon) register even when addressing a poor teacher. That is, sometimes there is a stratification and the individual speaker has really no option, he must show respect by compulsion as it were. Sometimes, however, a speaker may deliberately violate the register norms laid down by society; but here too a speaker attitude becomes unmistakably evident (see the

passage quoted from Marlowe earlier). When a teacher, for instance, addresses an erring student in the (+hon) register

(56) aap kyaa kar rahe the

(you) what do (present perfect continuous)

+hon

What were you doing?

there is a strong element of ridicule, which the particular student or the rest of the class is very unlikely to miss.

But if we define the (+hon) feature in terms of speaker attitude, no other means seems to be available, then pragmatic features become an essential component of the grammar. There is no way of ignoring this feature, otherwise the difference between the pronominal forms (viz. between tum and aapni), the concomitant verbal inflections remain unexplained and unaccounted for. Neither can the grammar, in that case, make a statement about ungrammaticality in very many cases (viz. sentences 29-43). The grammar then cannot ignore these factors at all. Katz and Fodor (1964) clearly state: "If speakers can employ an ability in apprehending the structure of any sentence of a language without reference to information and about settings and without significant variation from speaker to speaker, then that ability is properly the subject matter of a synchronic theory of linguistics" (Page 484 (Italics mine)).

In the traditional view, pronouns replace repeated occurrence of nominal expressions within sentences and within longer stretches of speech. This view was taken over by early TG Grammarians in the form of the belief that there is a Pronominalization Transformation that introduces the requisite pronoun in place of the noun. (The clearest account of this point of view is to be found in Lees and Klima (1969)). In this view the only way of incorporating this (+hon) feature would be to resort to lexical markings. That is, the noun to which the pronoun refers would have to be marked (+hon), which would in turn determine the shape of the verb. (In the standard model the verb is sub-categorized with reference to the noun. Chomsky (1965:102)). Apart from the fact that TGG has stayed clear of proper nouns by and large except for assigning referential indices wherever necessary, adding features of this kind would raise other complications. The person Ram, let us say, is marked with feature (+hon) - and there are two people speaking about him: one, (A) to whom Ram is "socially superior" and the other, (B) to whom Ram is "socially inferior":

A. (57) veh aaye the

He come (past)

(+hon) (+hon)

He came.

B. (58) kya, raam aayaa thaa

what Ram come (past)
-hon

What, did Ram come?

veh and Ram refer to the same person, and therefore, should have the same marking with regard to the (+hon) feature, yet the marking in (57) and (58) as well as in (59) and (60)

(59) uni eshechhilen

he come
(+hon) (past)
+hon

(60) ki raam eshechhilo

what, Ram come (past)
-hon

are not only not identical but distinct. (Chomsky (1965:110) requires that for lexical insertion the relevant features must be non-distinct and not necessarily identical). And yet the sentences are perfectly natural and grammatical. One can, of course, try to dismiss the whole problem by saying that a grammar needs to generate "all and only" the grammatical sentences and has nothing to do with discourse contexts. But even this argument becomes untenable in this particular case. Langendoen (1969:80), (1970:116) clearly indicates that in the case of pronouns a grammar needs to operate across sentence boundaries.

In view of the Bach-Peter sentences which involve a process of infinite regress in the Lees and Klima framework (for a discussion see Langendoen (1970:119 cf)), Postal (1969) among others suggested that pronouns should be allowed to originate in the deep structure itself. Even this formulation provides no solution to the problem at hand: two pronouns may have an identical reference and yet have distinct feature markings:

(61) kyaa voh aagaya hai
 what he come (present perfect)
 (-hon) -hon

(62) hāa veh aagaye hāi
 yes he come (present perfect)
 (+hon) +hon

The only other conceivable way is to let pragmatics be a sub-component of the semantic component. The four sentences (63), (64), (65) and (66) which are cognitively similar:

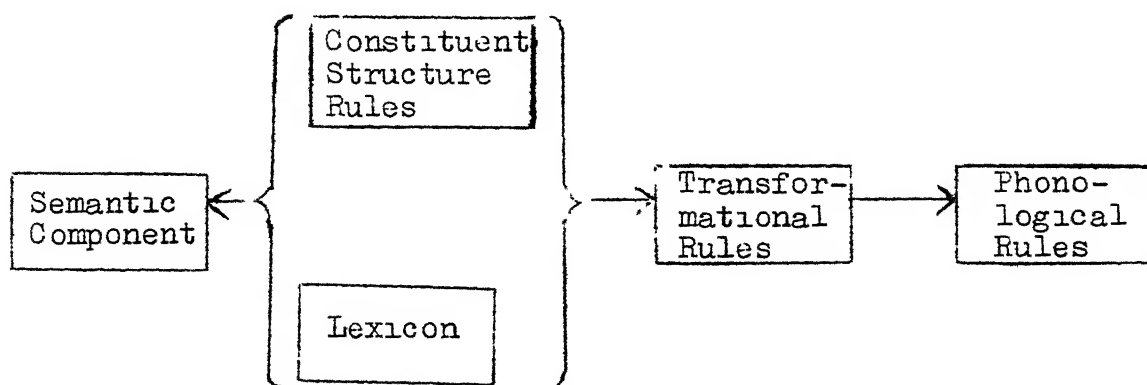
(63) aapni jaan
 you go

(64) tumi jaao
 you go

(65) aap jaale
 you go

(66) tum jaao
 you go

enter into the semantic component in some neutral form which carries the cognitive meaning of the sentences. The semantic component in the last lap refers the sentences to the pragmatic sub-component where the (+hon) feature is assigned taking the speaker attitude into account. This attempt to smuggle pragmatics in through the backdoor after having thrown it out from the front is a non-starter from the very beginning. It overlooks the fact that semantics (of which pragmatics is now a sub-component) plays or is supposed to play a purely interpretative role and therefore cannot "generate" any fragment of the sentence. And yet, the form of the pronoun as well as the concomitant verb inflexions can only be determined and thus "generated" here. This will wreck total havoc on the frame where the syntactic deep structure is the input to the semantic component and the surface structure is the input to the phonological component and there is no connection between the semantic and the phonological components.



(Figure from Langendoen (1970:6))

We must now have some way of providing semantic information to the phonological component, thus, undoing the very structure of the theory.

Chomsky (1971) made a departure from the Standard Model inasmuch as it allowed surface structure to contribute some aspects of the total meaning of a sentence. But it must be remembered that there was strong motivation for doing this. The position of the Neg and the Quantifier in the surface structure did indeed tend to determine their scope — just as the stress and intonation pattern (which belonged to the phonological component) seemed to determine the presupposition of a sentence. The credibility of the Extended Standard Model would depend to a large measure on its ability to state precisely what elements of meaning would be determined at the level of surface structure and convincing arguments would have to be given to show that the particular aspect did indeed naturally belong to the realm of the surface structure. Vague statements that a particular aspect of meaning (say the difference between tum and aapni) would be taken care of by surface interpretation rules — would not do at all. Moreover, our present problem is much more complex: it is not only semantic interpretation that is at stake, it is the problem of "generation". How are the pronominal forms and the concomitant verbal inflexions to be "generated"?

Particles: The pronouns are not the only items which create these kinds of problems for the Standard Model. There is a particle jii in Hindi which marks the noun with the feature (+hon) and the verb inflects accordingly.

(67) pandit aarahaa hai

Pandit come (present continuous)
-hon

Pandit is coming.

(68) *panditjii aarahaa hai

Pandit(particle) come (present continuous)
-hon

(69) panditjii aarahā hāi

Pandit (particle) come (present continuous)
+hon

It is here that the real weakness of the tentative argument that the significant difference between arahaa hai and arahā hāi is only that of number becomes manifest. It is true that veh is ambiguous between (honorific) singular and the regular plural and it might be argued that veh even when it is semantically (honorific) singular is syntactically plural and therefore takes the plural form of the verb i.e. arahā hāi. But how about (67-69)? No ambiguity about the number of the subject NP of these sentences is involved. Panditjii is unequivocally singular and yet it takes arahā hāi. If we wish to persevere with the plurality argument, we would have to say that the particle jii is a plural affix. This would clearly go against the intuitions of the native speaker of

Hindi. The more intuitively satisfying statement, however, would be that veh and aap are ambiguous between (honorific) singular and regular plural and similarly verb forms like rahē hāi are ambiguous between (honorific) singular and regular plural. Contextual discourse in the case of sentences with aap or veh as the subject NP would make disambiguation possible. Particles like jii, on the other hand, themselves would remove the ambiguity inherent in verbs like rahē hāi. The virtue of a statement of this kind is that it provides a natural and intuitively satisfying explanation for the ungrammaticality of (68) as well as (70)

(70) *veh akelaa aarahaa hai

he alone come (present continuous)

This rule also takes care of the Bengali examples with suitable modifications. The Bengali verb does not inflect for number, and there is no ambiguity concerning tini and aapni (the Bengali cognates of veh and aap) – therefore the ungrammaticality of (71) and (72)

(71) *tini aaschhe

he come

(+hon) (present continuous)
-hon

(72) *she aaschhen

he come

(-hon) (present continuous)
+hon

has to be stated purely in terms of Register Concord Rule violations. Hindi, too has register rules – but, because the Hindi verb inflects for number and some pronouns are ambiguous, Hindi requires an additional concord rule of number. A suitable study of Latin, Italian, French, German, Polish, Cambodian and Indo-Aryan languages, among others, will show that register rules of this kind are extremely general and have an extensive area of applicability.

The case with the corresponding Bengali particle is slightly different. The (+hon) marker – moshaal is the colloquial form of mohaashoe which literally means "a man with a noble purpose". But when this particle is affixed to a noun, it begins to function as a (+hon) marker, without any suggestion whatsoever of the original meaning. (Saddock (1974) shows that some metaphors through usage become stratified as idioms – and then they cut their roots from the original metaphorical meaning)

(73) pondit aashchhe

Pandit come
(present continuous)
-hon

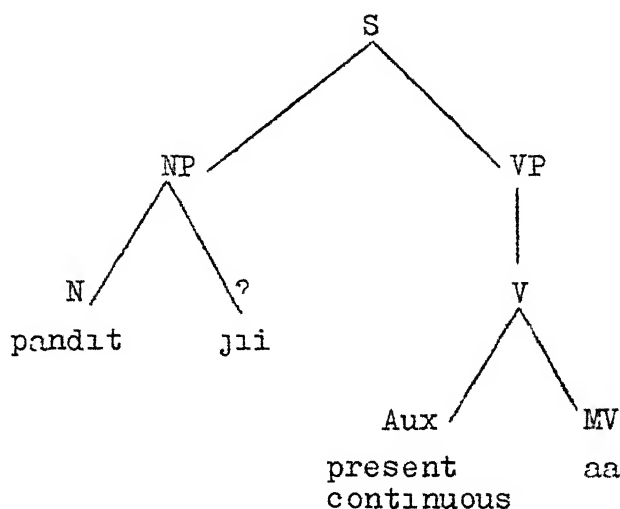
(74) *pondit moshaal aashchhe

Pandit (particle) come
(present continuous)
-hon

(75) pondit moshaal aashchhen

Pandit (particle) come
(present continuous)
+hon

The specific problem with these particles is as follows: the base component generates categories which end in dummy symbols consisting of features. Under which node or which category are jii and moshaai to be placed?



moreover, the particle jii or moshaai can occur away from the noun

(76) aap chale aaie jii

you come (particle)
(present)

(77) aapni chole aashun moshaai

you come (particle)
(present)

These particles cannot be treated like adverbial particles in English which can be moved by a transformation. The adverbial particle which can be moved optionally across "Non-Complex NPs"⁴ or obligatorily after pronouns, is associated with the verb in the deep structure:

(78) Switch on the light.

(79) Switch the light on.

(80) *Switch on it.

(81) Switch it on.

There is no reason to believe that the jii in (76) and moshaai in (77) are associated with the subject NP in the deep structure:

(82) atleast sounds extremely odd - it may even be ungrammatical:

(82) ?aapjii aajaale

you (particle) come (present)

One can, of course, take (82) to be one of those remote deep structures which never surface in their original forms (somewhat like Paul Postal's proposed Deep Structures for his Psych Movement sentences). Apart from the fact that linguists like Jackendoff (1972) have persuasively argued against having deep structures of this kind, there is reason to believe that these sentences are not much different in form from their deep structures. It is possible to nominalize these sentences:

(83) aapnaar chole aasha moshaai

your coming (particle)

(84) aapka chale aana ji

your coming (particle)

Chomsky (1968:106) says ".... nominal phrases exist corresponding to sentences that are very close in surface form to deep structure, but not corresponding to such sentences that

are remote in form from deep structure". It, therefore, seems that these particles cannot be associated with the subject NP, much less be treated as a feature of the subject NP. The absurdity of treating the (+hon) marker jii as a feature of the subject NP becomes evident when we see that this would call for the possibility of a feature being realized as a lexical item away from the lexical item of which it is a feature. The particles jii and moshaai therefore must be allowed to stand independently and in isolation. But in that case under which category, under which node are they to be placed in the deep structure? Or to put it more generally, how are they to be "generated"?

It would seem obvious that a Generative Syntactic model is confronted with embarrassment of this kind because of its refusal to incorporate relevant pragmatic features into its descriptive machinery. The refusal is not by choice but by compulsion as it were. The presupposition that the generative capacity solely rests with ^{the} syntactic component rules out the possibility of incorporating these features into the grammar. Chomsky (1965) makes a desperate attempt to smuggle in the less complicated semantic features into the syntactic component but, the effort is not entirely convincing for the reason that these features and specifications need to be stated all over again in the semantic component. The Syntactic Lexicon and the Semantic Dictionary have very many things in common.

It was obvious even then, perhaps, that Standard Model's day of reckoning was not far off: further exploration would reveal features which would be too much even for the indiscriminate syntactic dragon to devour.

The Generative Semantic model is certainly better equipped to deal with situations of this kind. If pragmatics is made a sub-component of semantics — which is generative in any case, this problem can be tided over. All that will be required will be to add an extra node in the semantic phrase marker which will specify the "speaker attitude". And this in turn will tell us whether the Lexical Transformation will introduce tum or aapni, whether the particle moshaai can be introduced and what the shape of the verb will be.

Recapitulating what we have tried to do in this chapter: we have mounted a two-pronged attack on the Generative Syntactic model. We have tried to show that the Generative Syntactic model can make no statements on the "appropriateness of use" of the various pronouns, and, what is worse, cannot even generate them in a convincing and systematic way.

We have also tried to show that the Generative Syntactic model cannot even make a statement about the deviance of a host of palpably ungrammatical sentences. Grammars, therefore, constructed on the theory of generative syntax would fail to qualify as "Generative" grammars of

inflecting languages like Hindi and Bengali. Further, we have tried to argue that the incorporation of a pragmatic feature – "Speaker Attitude" into the ("Generative") semantic component of the grammar results in a natural and systematic explanation for the phenomenon under consideration.

NOTES

Notes to Chapter I

1. Even Katz and Fodor (1964), which is perhaps the most cautious approach to the study of semantics, has unwittingly accepted the claims of the communication intention theorists. At a crucial juncture it concedes that the semantic ability of a native speaker lies in his ability to understand what "the (anonymous) letter says" (see page 486 for details). Katz and Postal, of course, made no bones about admitting categories like Q and IMP as deep structure categories.
2. On page 6 - he makes an almost casual mention of "appropriateness" of sentences in actual use.
3. Downes (1977) requires a pragmatic analysis to meet these conditions before it can claim plausibility.

Notes to Chapter II

1. Lindholm (1969:157) in footnote 1 writes "Dwight Bolinger has pointed out that these pairs are not perfectly synonymous in actual fact In this paper I pretend that this embarrassing fact does not exist".
2. Strictly speaking, of course, neither (3) nor (4) can be the deep structure, but only the propositional core that underlies them; and this is what we mean here.
3. Sentences (23) and (25) can also be rewritten in the overt experiencer case:

aamaar mone hoe naa she aas'he
 mujhe nahi lagtaa hai ki voh ayegaa

for further details see Appendix I, see also Appendix II for an analysis of seem.
4. (25) and (26) are in Hindi which means that even Hindi has a neg-raising transformation.
5. Or more precisely the "non-be-of-the-opinion" sense .
6. mone hoe is the experiencer case cognate of the agentive mone kori.

7. This aspect is spelt out in greater detail in Appendix I and in the additional notes at the end of Chapter II.
8. Only Karttunen (1971) and Hooper (1975) have said that verbs like know are semi-factives; but this is with respect to their behaviour with conditionals when they do not yield presuppositions. This has no bearing on the matter under discussion.
9. The only possible way of interpreting these sentences in a sensible way is by treating them as "buck-passes" when they don't carry the normal presuppositions (Cattell (1973:623ff)). We suggest a different reason for the anomaly of (87) - which we think is the real reason.
10. There is, however, no bar to a person not having an opinion about something.
11. Janet Dean Fodor seems to have come to a similar conclusion in an unpublished paper "Whose Description" in which she calls sentences like (87) - 'double shrick' (!!) - Quoted in Rijk (1974).
12. We have ignored verbs like regret which have a (+emo) aspect.
13. The analysis of WH complements could solve a nagging question in philosophy: the difference between know how and know that. Ryle, Austin, Betty Powell among philosophers and Lehrer among linguists have engaged themselves in discussion over these without attacking the real point at issue.

Notes to Chapter III

1. FACT was first read in 1967 in Bucharest.
2. Kiparsky and Kiparsky note that know though semantically factive is syntactically non-factive.
3. Hooper, however, is satisfied in classifying them as non-assertive true factives, and does not mention the fact that they are emotives.
4. In the sense of Fillmore (1971).

Notes to Chapter IV

1. Redundancies play a very important role in all communication systems; they ensure that the message is not lost if there is an accidental disturbance in the Channel. See Shannon and Weaver (1949).
2. Term borrowed from Fillmore (1971).
3. See Chapter V for a discussion of registers in Bengali and Hindi.
4. We have already argued that appropriateness of use is very much an integral part of the intrinsic linguistic competence of an idealized speaker-hearer.
5. In my dialect the inverted word order does not tolerate any particle in the intended sense. In some other dialects - this may not be the case; even then the difference between the inverted and the normal word-order cannot be mistaken.
6. In the Standard (and presumably in the Extended Standard) Model - the lexicon gives the category of the item and then defines it by means of syntactic features.
7. The dictionary reading for forbidding is stern, repellant and threatening.

Notes to Chapter V

1. Quoted in Quirk et al (1970).
2. This form does not exist in some dialects of Hindi; but it can be found in khaRi boli - we take this dialect to illustrate the point we wish to make.
3. There is, however, a provision in Bengali to do away with registers; this in itself constitutes a register - because it is used when one is not too sure whether (b) or (c) should be adopted

aapnaar kothae jaawaa hochhe
tomaar

your where to go (infinitive) happen
4. Ross (1969:291) points out that particle separation cannot operate across complex NPs.

APPENDIX - I

SYNTACTIC PECULIARITIES OF NEG-RAISERS

We have briefly looked at the syntactic peculiarities of the neg-raisers in Chapter II, we should like to examine these peculiarities in somewhat greater detail in this section.

Progressive: In one reading – the reading that allows neg-raising – the verbs think, believe, suppose, guess, expect etc. – do not co-occur with the progressive aspect

- (1) *I am thinking that Mary is crazy.
- (2) *I am believing that Mary is crazy.
- (3) *I am expecting that Mary is crazy.

There could be some doubt about sentences (4) and (5)

- (4) I am supposing that Mary is crazy.
- (5) ?I am guessing that Mary is crazy.

but it is clear that neither of these verbs have been used in the "be of the opinion" sense. Our semantic intuitions can draw support from the clear cases in Bengali. These sentences cannot be translated into Bengali using the common neg-raiser – mone kori. They would rather be translated as

- (6) aami dhore nichhi je meri paagol

This sentence can be retranslated into English as

- (7) I am assuming that Mary is crazy.

and the dictionary shows that suppose has assume as one of its meanings. Similarly (5) cannot be translated into Bengali with the neg-raiser. An appropriate translation would be

- (8) aami onumaan korchhi je meri paagol

which could be retranslated into English as

(9) It is my conjecture that Mary is crazy.

and guess has a meaning conjecture in the dictionary.

The verbs think, believe and expect conversely can co-occur with the progressive aspect in the "non-be-of-the-opinion-that-S" sense:

(10) I am thinking of going to the States.

(11) I am expecting him to come tonight.

(12) More and more people are now believing what the newspapers say.

None of these sentences can be translated into Bengali using the common neg-raiser mone kori. They would rather be translated as

(13) aami stets e jaawaar kothaa chintaa korchhi

I states to going of think do (present continuous)

(14) she aaj raatire aashbe aasha korchhi

he today night in come (future) expect do (present continuous)

(15) kromosho beshi lok kagoje jaa lekhe taa bishash korchhe

gradually a lot people paper in what write that believe do
(present perfect)

(13), (14), (15) can be retranslated into English by (16), (17)

and (18) respectively without significant difference and they do not differ cognitively from (10), (11) and (12) respectively:

(16) I am considering about going to the States.

(17) I am hoping that he will come tonight.

(18) More and more people are assuming what the newspapers say to be true.

WH complements:

(19) *I think what he says.

(20) *I suppose what he says.

(21) *I guess what he says.

(22) *I expect what he says.

The only sentence that can create some confusion is

(23) I believe what he says.

As it is to be expected (23) cannot be translated by the use of mone kori - one would have to say:

(24) aami or kothaa bishaas kori

I his word believe do (present)

which can be retranslated into English as (25)

(25) I accept as true what he says.

and believe has a meaning accept as true. Conversely think, guess, suppose, expect etc. in their "non-be-of-the-opinion-that-S" sense do not resist WH complements:

(26) I am thinking what can be done.

(27) I am guessing what must have happened.

(28) I was expecting what has happened.

These sentences cannot be translated into Bengali by using the common neg-raiser; nor can any of these sentences allow another verb to take the place of the chosen verb. That is to say that we cannot substitute thinking in (26) with believing without making the sentence ungrammatical or substitute thinking by guessing without considerably altering the meaning. But on

the other hand we have already seen that atleast in one reading there is next to no difference between

(29) I think Mary is crazy.

(30) I guess Mary is crazy.

(26), (27) and (28) can be translated in Bengali by (31), (32) and (33) respectively.

(31) aami chintaa korchī ki koraa jete paare

I think do (present continuous) what do go can

(32) aami onumaan korchī ki hoe thaakte paare

I guess do (present continuous) what happen stay do

(33) aami jaa aasha korchhilaam taai hoechhe

I that expect do (present continuous) that happen
(present perfect)

What I had expected has happened.

It is clear that (33) is of a different syntactic type from the others; the what clause in (33) as in (28) is not a genuine indirect question. Moreover, it is difficult to think suppose appearing with any kind^{of}/WH clause - either in the "be of the opinion sense" or in the "non-be-of-the-opinion-sense". The lack of symmetry in the "be of the opinion" vs "non-be-of-the-opinion" however does not affect the point at issue. We are not interested in showing that the "non-be-of-the-opinion" sense of these verbs fall into a pattern - but that the "be of the opinion that S" sense of these verbs share certain marked syntactic characteristics which strongly suggests that they belong to the same "natural class".

The whole exercise of trying to cast a cursory glance at the syntactic properties of the "non-be-of-the-opinion-that-S" meanings of these verbs is aimed at providing some sort of syntactic verification of our semantic intuitions namely that the "non-be-of-the-opinion" sense is sharply differentiated from the common "be of the opinion" sense of these terms. No attempt is being made to classify the divergent "non-be-of-the-opinion" senses of these verbs into a single category — because at least to us, they do not seem to belong to a homogeneous group. If incidentally they do share some peculiarities — as indeed they do with regard to the use in the progressive aspect — it only aids us in establishing the difference between the putative common "be of the opinion that S" sense of these verbs from the diverse "non-be-of-the-opinion" senses of these terms. It should be clear that we are not trying to establish any kind of "minimal pairs" we have already gone much beyond that by providing a rationale for the syntactic peculiarities for this meaning of these verbs in the additional notes to the second chapter. Moreover, an exercise of this kind serves to dispel a lurking doubt that selectional restrictions of this kind are an idiosyncrasy of the verbs themselves, rather than a natural consequence of a particular meaning of these verbs.

The idea of referring back to Bengali stems from a methodological requirement. We find that we have verbs ABCD in English which have readings sabcd, sefgh, sljkl and smnop respectively — that is there is one meaning s which is common

to all the verbs. We find that in one reading atleast – they have a set of syntactic peculiarities PQR. We turn to Bengali and find that ABCD atleast in one reading can be translated by G which incidentally has a reading s and it shares the peculiarities PQR. From this we arrive at the hypothesis that the peculiarities PQR are a function of the s reading of ABCD as much as it is of the s reading of G. Furthermore that ABCD and G belong to the same natural class albeit a semantic class. At the level of Explanatory adequacy this hypothesis should seem more acceptable firstly because it simplifies the grammar by dispensing with the lexical markings of the lexicalist hypothesis. And secondly, because the hypothesis in effect claims that the classification is cross linguistic and perhaps even universal. It is also descriptively not inadequate because the predictions that this hypothesis makes are in consonance with our semantic intuitions. Having cleared these methodological issues we return to some more syntactic peculiarities.

We have already seen that the sentences with SO sentence pronominalization can be translated by using the common Bengali neg-raiser mone kori – we should now like to show that sentences with IT sentence pronominalization cannot be translated by mone kori

(34) I believe it.

(35) aami etaa bishaas kori

I this believe do (present)

(36) I guessed it.

aami etaa onumaan korechhilaam

I this guess do (past)

(37) I expected it.

(38) aami etaa aasha korechhilaam

I this expect do (past).

Direct objects: Another peculiarity of the "be of the opinion" sense of these verbs is that they do not take direct objects but only sentential complements:

(39) *I think him

(40) *I expect him (in the intended sense)

(41) *I guess him

(42) *I suppose him

(43) *I believe him (in the intended sense)

(40) and (43) can only be grammatical when they are interpreted as

(44) I expect him to come.

(45) I believe what he says.

And in Bengali they cannot be translated by using the common neg-raiser mone kori, they would rather be translated as

(46) aami aashaa korchhi she aashbe

I expect do (present continuous) he come (future)

(47) aami taar kothaa bishaash kori

I his word believe do (present)

Prepositions: These verbs in the neg-raising sense do not co-occur with prepositions

(48) *I think
 believe of Mary is crazy.
 suppose
 expect

but we have already seen (sentences 11 and 12) that there is no bar to prepositions occurring with the "non-be-of-the-opinion" senses of most of these verbs. For instance it is more natural to say we believe in something or we guess about something or we expect something of somebody.

APPENDIX - II

IS SEEM A PSYCH-MOVEMENT VERB?

The general consensus in TG treatments (see Rosenbaum (1967:98); Postal (1971:42)) of sentences like (1) and (2) is that they are truncated forms of (3) and (4)

(1) The soup tastes funny.

(2) The milk smells good.

(3) The soup tastes funny to me.

(4) The milk smells good to me.

Both Postal and Rosenbaum go on to suggest that both the sets (1) and (2) on the one hand and (3) and (4) on the other should be derived from "remote" structures¹ like (5) and (6)

(5) I taste the soup funny.

(6) I smell the milk good.

by a transformation called Subject-Object-Inversion (Rosenbaum) or Psych-Movement (Postal), Postal takes note of the fact that the verbs in (5) and (6) are active verbs whereas those in (1), (2), (3) and (4) are statives and that the selectional restrictions for the two sets with reference to adjectives and adverbs are not uniform. That is, the stative verbs of (1) and (2) take adjectives (funny and good) but cannot co-occur with a certain kind of adverbs:

(7) *The soup tastes carefully.

(8) *The milk smells carefully.

Conversely, the active perceptual verbs co-occur with this kind of adverbs but not with adjectives

- (9) I tasted the soup carefully.
- (10) I smelled the milk carefully.
- (11) *I tasted the soup funny.
- (12) *I smelled the milk good.

In spite of this kind of evidence² of which he did not seem to be unaware, Postal chose to persevere with the Psych-Movement Transformation so as to be able^{to}/establish the Cross-over Phenomena.

We should like to argue here that if we desist from glossing over this embarrassing evidence and take a closer look at it, we can arrive at a formulation which seems to be more satisfactory. We propose to extend the Rosenbaum-Postal analysis and to look at fresh evidence, both syntactic and semantic, before we propose an alternative formulation.

Extension: The Rosenbaum-Postal analysis, presumably, can not only be extended to the other perceptual verbs (look, sound, feel etc.) but also to those verbs like seem, where Extra-position must apply obligatorily.

- (13) (a) It looks good.
- (b) It looks good to me.
- (c) I look it good.
- (14) (a) It sounds good.
- (b) It sounds good to me.
- (c) I sound it good.

- (15) (a) It feels soft.
 (b) It feels soft to me.
 (c) I feel it soft.

- (16) (a) It seems good.
 (b) It seems good to me.
 (c) I seem it good.

Syntactic evidence: Syntactically, however, seem appears to belong to a different class from the perceptual verbs.

- (17) He looks a gentleman.
 (18) *He seems a gentleman.
 (19) He seems to be a gentleman.
 (20) *He looks to be a gentleman.
 (21) It looks like blue.
 (22) *It seems like blue.
 (23) It seems to expand.
 (24) *It looks to expand.
 (26) It seems that they've all been beaten.
 (27) *It looks that they've all been beaten.
 (28) It seems to look good.
 (29) *It looks to seem good.³

A major difference is that seem is a neg-raiser but not look

- (30) It seems that he won't come.
 (31) It doesn't seem that he will come.

- (32) *It looks that he won't come.
 (33) *It doesn't look that he will come.

As Lindholm (1969), Cushing (1972) and Per Lsvag (1975) have pointed out, all neg-raisers allow sentence pronominalization by SO and NOT

- (34) It seems so.
 (35) It seems not.

- (36) *It looks so.
 (37) *It looks not.

Another thing which we should briefly like to note before we pass on to the semantic difference between seem and look (and the perceptual verbs in general) is that though look is not a neg-raiser it seems^{to} become so when it is followed by as if

- (38) It looks as if he isn't happy.
 (39) It doesn't look as if he is happy.

Semantic evidence: (38) and (39) seem to suggest that seem is closer to look as if rather than to look. The evidence in (17-24) would seem to suggest that there is a significant distinction between (13a) and (16a) which is sometimes overlooked. We wish to persevere with this difference a bit further so as to be able to show that it is extremely unwise to relate (13a) to (13b) in the way it has been done in the

Rosenbaum-Postal formulation. We should like to argue that the relationship between the (a) sentences and the (b) sentences in (13-15) is not that of synonymy but entailment.

To return to the difference between seem and look.

Austin (1962b:42) forcefully argues that "the descriptions of looks are neither 'incorrigible' nor 'subjective'. It is, perhaps, just as much a fact of the world, just as open to confirmation and challenge as things are. I am not disclosing a fact about myself but petrol, when I say petrol looks like water." That is to say that when one says

(40) Parallel lines look convergent.

(41) The stick looks bent in water.

there is no subjective element involved at all; a photograph would bear this out. That is to say they do have an appearance of this kind under optimum physical conditions. There is, therefore, no necessity or justification (atleast semantically) for appending a sentence like (42)

(42) It looks good.

with a subjective element like "to me"

(43) It looks good to me.

and then deriving it from a "remote" structure

(44) I smell it good.

But why is there a tendency to treat (42) and (43) as being synonymous? This is perhaps because (42) entails (43). This is to say that if it is true that (45) expresses a "fact about

the world, just as open to confirmation or challenge as the way things are"

(45) The sky looks blue.

then it is not surprising that it should appear so to me too

(46) The sky looks blue to me.

Unless, of course, something is wrong with my visual sense.

The evidence in (38) and (39) we have already noted suggests that seem and look as if are closer to each other than seem and look. Price (1941:282) makes the distinction succinctly "seeming has reference to judgements of a wholly spontaneous and unconsidered kind, while looking has reference to sensation."⁴ Quinton (1955:33) indicates that whereas the perceptual verbs describe a basic sensation verbs like seem serve "to indicate that these conclusions are drawn with less than full confidence." Sibley (1971:89) also indicates that in seem the opinion indicator is at a larger premium than in look. Cushing (1972) is hinting at something similar when he says that verbs like seem (and neg-raisers in general) are (-stance) verbs. That is when the speaker prefaces a statement with what Prince (1976) calls a "metastatement" hedge like seem — he is reluctant to take a stand or to use Austin's terminology, one is not in position to "stake one's reputation" about the truth of the complement clause. That is to say when some one says

(47) It seems good.

he is only saying that it is his opinion that (47) is true.

It is quite natural therefore to assume that (47) is a truncated form of (48)

(48) It seems good to me.

And if there is reason to believe that the perceptual verbs are not Psych-Movement verbs - the motivation for this transformation becomes suspect and cannot be allowed to be incorporated in the grammar just to account for a verb or two like seem and that too with the use of "remote" structures of dubious validity.

The foregoing discussion would seem to suggest that

(49) should be derived from (50)

(49) It looks good.

(50) It looks good to everyone.

where the Indefinite Object Deletion Rule (G. Lakoff (1971:127)) converts it to (49). If we accept this formulation we seem to have met the semantic requirement without providing any explanation for the selectional restrictions on these verbs with respect to adverbs and adjectives. If however, we derive these sentences from an entirely different source we can meet the semantic requirement as well as provide an explanation for these syntactic peculiarities.

(51) It has a look which is good \Rightarrow It looks good.

(52) It has a taste which is funny \Rightarrow It tastes funny.

(53) It has a smell which is good \Rightarrow It smells good.

The major transformations that are necessary are WHIZ, adjective prepose and one which converts a noun into a verb. The nominal form being converted into a verbal one, perhaps, has independent necessity in the grammar of English:

(54) He has had a bath.

(55) He has bathed.

(56) He has had a sleep.

(57) He has slept.

The advantage of this formulation is that it explains the syntactic peculiarity of these verbs without violating the semantic requirement. To borrow Zeno Vendler's (1971) picture-seque terminology — the nouns have been converted into verbs but they have not been tamed: they retain their love for adjectives and aversion for adverbs. If we consider the Bengali and Hindi cognates of (1) and (2) we are reassured that we are on the right track:

(58) suuptaar saad odbhuut

soup art. of taste peculiar

(59) yeh suup kaa swaad ajib hai

Art. soup of taste peculiar

Similarly (2) can be translated in Bengali by (60)

(60) duudhtaar gondho bhaalo

milk art. of smell good

That is to say there is a genitive construction involved just as in (51-53).

Deriving sentences with stative perceptual verbs from relativized nouns sets them off from the verb seem. (47) cannot be derived in a similar way simply because the verb seem has no corresponding noun seem. Even the lexical evidence seems to indicate that the present formulation is the correct one.

Notes

1. Jackendoff (1972) persuasively argues against taking recourse to "remote" structures of the kind Postal proposes.
2. It is for reasons like these that both Rogers (1971) and Scovel (1971) scoff at Postal's attempt to derive the stative perceptual verbs from their active cognates.
3. Sentences (17-27) from Austin (1962b:26ff); (28) and (29) from Quinon (1955).
4. To confuse between sensation and subjective responses would amount to perpetuating the "sense-datum fallacy" with a vengeance.

A NOTE ON TRANSCRIPTION

Paucity of extra symbols available in typewriters has compelled us to keep the transcription as simple as possible. We felt that since nothing substantially depended on the accuracy of the transcription, it would do to make the best of a bad bargain.

Vowels

1. V - single vowel
2. VV - long vowel

Example:

- a - short unrounded low back vowel
- aa - long unrounded low back vowel
3. e, o - long mid front and long mid back vowels
 respectively
4. æ - short front low vowel
5. \bar{V} - nasalized vowel

The distinction between the Bengali mid rounded back and the low rounded back vowel has been ignored. Both these have been represented by o

Consonants

1. sh - voiceless palatal fricative
2. ch - voiceless palatal affricate
3. chh - voiceless aspirated palatal affricate

- 4. n - velar nasal
- 5. j - voiced palatal affricate
- 6. Ch - aspirated consonant
- 7. R - voiced retroflex flap
- 8. v - rounded back semi-vowel
- 9. y - front semi-vowel

The difference between the dental and the retroflex stops has been ignored.

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